THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

NEW SERIES. ALBANY, DECEMBER, 1850. VOL. VII.—No. 12.

Close of the Volume.

THE close of the year brings us again to the point at which it becomes necessary, in accordance with our established plan, to commence our subscription list anew. The present number completes the seventh volume of the new series of THE CULTIVATOR, making the seventeenth from the commencement. Concerning our past course, we have little to offer; our work has been long before the public, and has been judged by its merits. We have no desire to appeal from that judgment, but shall labor assiduously, as we have hitherto done, to "IMPROVE THE SOIL AND THE MIND." The past year has brought many circumstances of encouragement, and that upon whose threshold we are about entering, is not without hopeful and cheering prospects. The taste for agricultural improvement is on the increase. The number of farmers who read and *study*—who endeavor to trace the connection of cause and effect, in the various phenomena which pass under their observation, is being gradually but constantly augmented. Thirty years ago, there was one, and only one, regularly issued agricultural periodical in the United States; that was commenced in 1819. Three years later a second was started: it was a subject of doubt, with some, whether the two would be sustained. Now, no less than fifteen are issued monthly, in the States, and one in Canada, besides five weekly papers in which agriculture is the leading subject. There are also two or three periodicals specially devoted to horticulture.

These publications wield a great influence. They have awakened a large body of the farmers to the importance of their calling,—and realizing the great fact that agriculture feeds all and clothes all, they have been led to a just appreciation of their position in the social and political organization of society. They perceive that an art which lies at the foundation of all other arts, is inferior to none in dignity; and as they investigate its principles, they see that it affords ample scope for philosophic investigation, and the exercise of the powers of the mind. Men of intellect and ability have become convinced that agriculture presents a field worthy of their labors. The erroneous notion formerly entertained by many of our young men, that honors were not to be found in the pursuit of agriculture, has been in a good degree discarded. Many of the most intelligent class have applied themselves to farming with energy. We are witnessing the ultimate effects of this influence on the husbandry of the country. Farm operations are carried on with more system, cultivation is practiced on more rational principles and with better and more certain returns.

Our object will be, as it has always been, to encourage and carry forward this spirit of improvement. Our work will contine to be a medium for the dissemination of principles and facts calculated to benefit all who are engaged in rural pursuits. In this labor we are happy in being permitted to say, that we shall receive the continued aid of Prof NORTON, of Yale College, and the Hon. F. HOLBROOK, of Vermont—men whose scientific and practical knowledge of all that pertains to agriculture, places them in the first rank of writers on that subject.

Our terms will be the same as heretofore—Single copy $1—Seven copies for $5—Fifteen copies, $10.

PRESENT TO SUBSCRIBERS FOR 1851.—A copy of "THE PICTORIAL CULTIVATOR ALMANAC for 1851," prepared and published expressly as a New-Year's Present for subscribers to THE CULTIVATOR, will be sent to each, with the January number. It is greatly superior to any thing of the kind which has yet appeared in this country, not only in the amount and richness of its engravings, and in its typopraphical finish, but it has been the aim to make it eminently useful, by presenting as large an amount of valuable condensed reading as can be compressed within the allotted space; and to give nothing in the shape of facts or practical directions, the correctness of which has not been thoroughly proved. It is printed on the same size sheet, and intended to form the first thirty-two pages of the volume of THE CULTIVATOR for 1851, with which it should be bound.

☞ For Premiums to Agents, see last page of this number.

☞ We have not thought it necessary to re-publish our list of Agents; but we shall be glad to have all who are disposed to aid in promoting the circulation of THE CULTIVATOR, consider themselves as especially appointed AGENTS to receive subscribers for our next volume, and for any aid they may render us, they will receive our hearty thanks.

☞ Prospectuses and sample numbers will be sent, on application, to all who desire them.

"Manure is Money."

THERE is no maxim in reference to agriculture, the soundness of which is more obvious than this, and none, perhaps, which is more disregarded in practice. It is often argued by farmers who are located on new and fertile soils, that there is no necessity for manuring—that the soil is already rich enough, or that the little benefit of manures would not compensate for the labor of applying them. It is not to be denied that there are particular cases to which this reasoning will apply; that is, there are soils which, for a while, contain all or nearly all the elements necessary for the support of crops; but the inevitable tendency of the growth and removal of plants, without any return, is the exhaustion of the soil, and this result must sooner or later be made manifest under all circumstances.

Besides, the idea of the inexpediency of manuring is, in many instances, carried to a pernicious extreme. A farmer chances to locate on a soil, which, when first subjected to the plow, yields bountiful returns; and flattered, or perhaps made indolent and careless, by the easy living he gets, he continues the course with which he began, till utter barrenness is the consequence. The country abounds with examples of this system of devastation; it has spread from the Eastern to the Western States, and is still progressing in the same direction. Everywhere its ultimate effects are the same,—the difference on different soils, being one of *time* only. Even in the new State of Ohio, the fertility of which, was, a few years since, vaunted the world over, there are many worn-out acres, which have been sold at low prices by their former owners, who have removed still further west, to run over and lay waste more new land. The same operations are in progress, more or less, in Indiana, Illinois, and other western States.

These effects would always be avoided by a proper course of management. It should be the first endeavor of the farmer to save and apply, to the greatest advantage, those fertilizing substances which he can most readily obtain. The excrement of animals, all animal offal—as entrails, flesh, skin, bones, horns, hoofs, &c.,—vegetable matter, in the form of straw, coarse grass, refuse hay,—wood-ashes, &c., should be carefully saved. The waste of these articles, in many parts of the country is really a subject of astonishment. On farms where the soil has already been much exhausted, and is every year growing poorer, it is not uncommon to find much of the manure of the barn-yard and hog-pen washed into the highway, or carried off by some neighboring stream. Inattention to the saving of urine, and the waste of that valuable fertilizer, is still more common, and a cause of still greater loss.

The means to be adopted by the farmer for saving the manure of his domestic animals, must be somewhat varied to suit particular circumstances. In the northern part of the country, stock is generally sheltered in winter—horses and cattle being commonly kept at night in stalls. Perhaps there is no plan which better answers the purpose of saving the liquid and solid excrements, than that of a cellar under the barn or stable where the animals are kept. This receives all, and if the bottom of the cellar has been made tight with clay or cement, there can be no waste. The temperature is not high enough to produce rapid fermentation, leaving the manure to gradually decompose, and its gases to combine with the litter, muck, or other absorbent matters, which should always be mixed with it to such an extent as to make it sufficiently dry to be readily loaded and carted. No situation can be more convenient for mixing these substances, or forming any kind of compost, as by keeping the manure level, and spreading over the materials to be added, at proper intervals, the whole will become intimately combined. It here undergoes no loss by keeping, but may be used whenever required.

In mild weather, cattle are kept more or less in yards and sheds adjoining the barn, and sheep are kept in sheds connected with yards. These sheds and yards should be well coated with muck or litter, before the stock is brought up in the fall. The yards should be in the form of a basin, so tight that nothing will soak through, and muck, potato vines, refuse corn-stalks, and other rubbish should be thrown in to absorb the liquid. The dung of sheep is dry, and from its containing a large proportion of nitrogen, is inclined to heat violently, by which much of its value is dissipated. To prevent this, it would be an advantage to spread a coat of muck, an inch or two thick, through the sheds, once a week, or if litter is more convenient it may be used, and kept sufficiently moist by being watered from a pump or aqueduct, by a spout or hose-pipe. Care should be taken that too much water is not applied —the manure should simply be *moistened*,—if made *wet* the sheep will be injured by being kept on it.

We saw, lately, on the farm of Mr. HENRY KEELER, of South Salem, Westchester county, N. Y., some good arrangements in regard to saving manures. His barns and sheds are so placed as to occupy three sides of a square, the opening being to the south. The basement of the main barn is used for stabling cattle and horses—the storage of hay, &c., being on the floor above, which is nearly on a level with the ground on one side. The horses are ranged on one side of the barn and the cattle on the other. The animals stand on ground considerably higher than the centre of the area—the centre having been excavated for the purpose of forming a receptacle for the manure. Into this, the manure from the cattle and horses is thrown, it being mixed together, and also mixed with litter. The urine from both sides is conducted into a tank, from which it is raised by a chain pump and turned over the manure-heap, in such quantities and as often as is necessary to keep it sufficiently moist. From the large quantity of absorbent matters mixed with the manure, no effluvium or gas is perceived to arise from it.

Mr. K. has, however, adopted another plan, which he likes better, and which we think preferable to the above, in another building, where most of his neat cattle are kept. The cattle stand on flag-stones, nicely laid, and which are kept at all times well covered with litter. Under the floor, between this flagging and the outside of the building is a cellar; but the cellar does not extend under where the cattle stand. The dung and urine all go into this cellar. All the appurtenances in reference to this place are not yet completed. The cellar is to form part of a yard—a firm stone-wall to be made round it. A shed roof is to be attached to the barn, in order to protect the manure from being too much drenched by rains, or dried by the sun and air. An apartment for hogs is made under one end of the building, with an opening connecting with this yard, and here they are to work at composting—the manure from the stock, and such other materials as may be gathered for the purpose, being thrown together to be mixed by them.

Mr. K. has plenty of good water brought in pipes to his stables and yards. This is of great importance, both as to the saving of manure and the well-doing of the animals, yet it is most strangely neglected by many farmers. Where cattle are

obliged to go to a pond or stream for water, they do not drink with proper regularity. If the weather is very cold or stormy, they will undergo much thirst before they will expose themselves, and when they do finally commence drinking, they swallow so much that they are chilled through, (the water being frequently but little above the freezing point) and stand for some time shivering from its effects. From the want of water at the proper time, and from the shock occasioned by drinking too much at once, their digestive organs are deranged, and their food fails to supply the proper nourishment. When water is brought to the yards, and the animals have constant access to it, they drink as they need—usually but a little at a time, and their food being taken as appetite prompts them, and with all the functions in healthy action, they derive from it the greatest possible benefit. The manure is all saved, being left in the stables or yards; but when animals are forced to leave the yards for water, much of the manure is left near where they drink, and is washed off where it does but little good.

Economy of using Animal Manure.—From the value which stable or yard manure has been proved to possess, it was with no little regret that we heard its use discouraged, in strong terms, by Dr. D. P. Gardner, in his late address before the Westchester County Agricultural Society. His objections to the use of this article were, chiefly, that it is of little value in proportion to what it is usually estimated at. He referred for particulars to an essay on the "Doctrine of Special Manures," written by him, and published in the *Transactions* of the N. Y. State Ag. Society for 1846. One of the objects of this essay, was, to quote the author's language, to "shake the confidence placed in the foul and expensive manure, so long employed." This confidence was to be shaken, by showing that the manure was of trifling value. He estimates the expense of manuring, with yard manure, an acre of land for Indian corn, in Dutchess county, at $20—allowing twenty loads of manure, of twenty-five bushels each; and in view of this expense, he thinks it reasonable that "the greater part of our intelligent [?] farmers have arrived at the conclusion, that for a man of limited means, the exhaustion of the soil is the most profitable system of farming." He contends that the principal value of common yard or stable manure, consists in the ashes it is capable of affording on being burned. He informs us that the Hindoo, whom he declares is "the most philosophical and successful agriculturist of the present, or of any age," burns the dung which our people "so much prize, and he even cares little for the ashes;" that "the Egyptians, the descendants of the Hindoos, and among the best farmers of ancient or modern times, also burn the dung of their domestic animals." He asserts that "the ashes, and a proper substitute for the nitrogen, will effect the same, or better results on the soil," than the manure. He therefore asks—"Why do farmers still encounter the heavy charge of a dollar a load for the use of yard manure, when they have better substitutes within their reach, for less than a quarter of that sum?"

The value of the ashes of a load (25 bushels) of manure, he estimates at *twelve and a half cents*; the cost of the "proper substitute for the nitrogen" he has not given. It will be seen that the carbonaceous matter of the manure is not estimated as of any value at all!

Dr. G. has not told us, precisely, what he would recommend as a substitute for common manure, but he hints that all the necessary information on the subject, may be found in a manuscript prepared by him in reference to a premium offered by the N. Y. State Ag. Society, but which "was withdrawn from the action of the committee," and is still in his possession. We are therefore without any special data in regard to the comparative expense of the new article; he simply asserts that it would cost less than a fourth as much as yard manure.

In regard to the theory of special manures, Dr. Gardner speaks as follows: "If the doctrine be found correct in practice, it will work a great reform in farming, by enabling us not only to manure at a trifling rate as compared with the present expensive means, but by making it a possible thing to raise the same crop on a piece of land without rotation; by removing the necessity of large farms and expensive fixtures for stock; by enlarging crops beyond any point they have hitherto reached, and lastly, by making agriculture much more a science of skill and intellectual expedients than manual labor."

This language does not differ materially from that used by Liebig in regard to his "patent manure," or a new system of compounding manures, which was extensively advertised several years since, but which, in regard to its profitable application, has generally failed. By adverting to this, however, we only intend to impress the necessity of caution in the adoption of untried theories. Investigation and experiment should be encouraged, but all things should be proved, and the good only held fast.

Fair of the Maryland State Ag. Society.

The third annual exhibition of this society was held on the 23d, 24th and 25th of October, at Baltimore, and was a very successful exhibition, being a decided improvement upon that of last year. The entries in most of the classes were much larger than heretofore, and in some departments the articles were superior. The great attraction in the stock department was the splendid herd of Devons, of Mr. Patterson, numbering 24 head. They were in fine condition, and were a sight well worth a trip to Baltimore to behold. The milking qualities of this herd are well known, and several of the cows exhibited, showed as good milking properties as any animals on the ground. The bull exhibited was, I think, imported, and was an exceedingly good one. Two pair of Devon working oxen were the admiration of all. Mr. P. declined entering his stock for premiums.

There was a very fair show of Short-horns; but not equal in quality to last year. The very fine herd of Col. Capron, which was then sold, did not appear upon the ground, and we doubt much whether it can be made good in Maryland. There was a large show of Ayrshires, and their crosses—some of them very fine, but many of medium quality. The Holstein cattle on exhibition, appeared to be good milkers, and are highly esteemed for their excellent dairy properties. Col. Calvert, the president of the society, informed us that he prefers them to any other breed, and intends to fill up his dairy with them. He has had several of them for some time past, and is competent to decide on their qualities from the trial he has given them.

One of the most interesting features of the exhibition of cattle was a pair of heifer calves, one six weeks and the other seven weeks old, trained by a lad five years of age, a son of Mr. Bailey of Fairfax county, Virginia, formerly of Dutchess county, New York. The little fellow had trained them in about three weeks time. They were so perfectly manageable that when the little yoke was taken off, he could

make them perform all that he desired, by the motion of the whip—placing one on the right side and the other on the left, and then changing them—in short, in or out of the yoke they were so trained as to be an object of universal attention and admiration. I heard a remark from a group of gentlemen standing by and witnessing the wonderful performance of the boy—"This is the way, after all, to bring up boys. This little fellow will make a man that will take care of himself." There can be no doubt of this, I think. If he lives, Mr. Bailey's good name will be well honored by his son.

The sheep, with the exception of the Long-wools by Mr. Reybold of Delaware, and Col. Ware of Virginia, were not entitled to much notice. Mr. Reybold's New Oxfordshires were the pride of the show. They are exceedingly fine sheep of their class, and cannot, I imagine, be excelled in this country. One of his fat wethers was slaughtered during the Fair, and weighed 206 lbs., very closely dressed. He received for him $100 on a standing offer of ten years. from Mr. Turner, a Baltimore butcher, and late candidate for mayor of that city. This mutton was purchased by the proprietor of the Eutaw House, who is a very liberal and enterprizing gentleman, and it will, in due time, grace the table of that famed hotel. About ten years since, Mr. Turner offered to give $100 to any breeder who would produce a fat sheep that would weigh 50 lbs. to the quarter, when dressed. On the arrival of Clayton B. Reybold, with his sheep, a day or two previous to the Fair, Mr. Turner saw them, and said to him that he was prepared to give the $100 for the fat wether, as he was satisfied he would weigh 200 lbs. The wether was slaughtered and dressed by Mr. Turner, and although in dressing him, the skin was taken off down to the very hoofs, much closer than is usual, the weight of the carcass was 206 lbs.

The show of horses was larger than last year, and very fair. The Morgan stallion, Black-Hawk, Jr., (a colt by the Vermont Black-Hawk) owned by Col. Carroll, attracted much notice. His figure and action are very superior, and he will add, I doubt not, much to the character of the horses of the State. There were several other horses that were good, and some very fine colts.

The swine were very fair, some exceedingly good; but not, I think, taken together, equal to last year. The Dutchess county pigs of Mr. Wilkinson, of the Mt. Airy Institute, were very fine. The exhibition of poultry was very extensive, embracing almost all the noted varieties, which have turned the heads of our Boston gentry. Some *Capons* were of such mammoth size, that they would doubtless command for *breeders*, (as some of like description have, I understand, at the East) $30 or more per pair!

In the implement department the show was of great merit. E. Whitman's exhibition was one of the largest I have ever seen, and Sinclair & Co.'s was nearly equal, and two or three others very fine. In fact nearly, if not quite, one-fourth of the ground was occupied by their implements. Very many of the articles were of the best of our northern manufacture, and I was pleased to learn that many sales of improved implements took place.

The plowing match was a very interesting scene: Twenty-three plowmen entered the arena, and thousands of spectators were in attendance. The ground was not such as to fully exhibit either the skill of the plowmen, or the perfection of the plow—still the work was well done by many of the competitors. Prouty & Mears' No. 5¼, received the award for the best plowing—being one of the plows which received a first premium at the N. Y. trial.

On the last day of the exhibition, an address was delivered by Willoughby Newton, of Virginia, a highly intelligent agriculturist. It was every way worthy of the cause and the speaker. P. A. Browne, Esq., of Philadelphia, gave interesting statements of his experiments in relation to wool, which were listened to with much attention. The attention shown by the officers of the society to strangers who were present, was what might have been expected from the known hospitality of the gentlemen of Maryland. There were in attendance a large number of gentlemen from Virginia, Delaware, Pennsylvania and New-York.

I have omitted to mention the show of *hams*. Twenty competitors contended for the prize, and the superiority of the hams exhibited, over any in our market, was most apparent, and I hope some means may be adopted to bring up ours to the standard of Maryland and Virginia.

The show of fruits, vegetables, flowers, fancy articles, &c., was very creditable to the society.

On Friday evening an election of officers took place, when Col. Calvert was unanimously re-elected president, and consented to serve. He is truly a valuable officer, whose services cannot well be dispensed with.

From the Maryland show I proceeded to Delaware, and had an opportunity of examining the splendid farms of Maj. Reybold and Sons, and others in that vicinity, among which was that of the Hon. J. M. Clayton, who is now most successfully devoting himself to the management of his farm, and I may, if time allows, give your readers some account of Delaware farming, and tell them of forty bushels of wheat to the acre, and of more than 3000 bushels from an 100 acres, raised by one farmer! B. P. J.

Irrigation.

During the late exhibition of the Royal Agricultural Society, a delegation of the officers, members and others, among whom was our countryman, L. G. MORRIS, Esq., of Westchester county, N. Y., visited the farm of Mr. GEORGE TURNER, near Exeter, for the purpose of examining the Water meadows belonging to that gentleman, and which are noted for their productiveness. Mr. T. explained his management to the company, and it was reported somewhat in detail. We extract the following from the printed account. The remarks are worthy the attention of our readers:—

The process by which boggy, or comparatively useless fields, are converted into verdant and luxuriant meadows, bearing very heavy crops of hay, and also affording admirable pasture, is, first of all, thoroughly to drain the land. The land is then allowed to remain for two years, to consolidate. If it be a heavy piece of land, it will probably be broken up, and laid down with fresh and well-selected grass seeds. After one year's grass, if the land be pretty well drained and seeded, in the following or second year from the time it is laid down, the water gutters are cut, and the water let in at the proper season. The proper season is from about Michaelmas till Lady-day; but Mr. Turner entirely objects to summer irrigation, as forcing the land too much, and as calculated to give the sheep, who then depasture upon it, the rot. In the hill-side meadows, the gutters (about two feet broad and three inches deep) conduct the water from a spring on the upper part of the hill-side, in a lateral, but oblique direction, with a gentle fall across the face of the hill. At the opposite side, but so arranged as to leave a

considerable interval between each main gutter, it turns, and brings the stream back, at a lower point, across the face of the hill again, and somewhat parallel with the first line, but still descending, when it again turns, and so on till it reaches the bottom, when it is applied to the meadows on the flat, if required, and the excess carried away in its proper channel. Across these gutters, at proper intervals, are placed dams, which restrain the current from proceeding till it can surmount the dam, which it is not able to do, till the water attains a sufficient height to compel it to overflow at the lower side of the gutter, throughout its whole length. The water thus streams over in a continuous but gentle sheet all adown the meadow, thoroughly saturating it, and conveying its nourishment and fertilizing power to all the grasses. Where requisite, from obstructions arising from inequality of surface, &c., small gutters are cut transversely from the main gutters, to supply those portions of the field which would otherwise be left partially, or entirely, without. This is continued for a fortnight or three weeks, according to circumstances. When the water is turned off, the grass is allowed to grow till about March, when it is depastured generally with ewes and lambs, which, after feeding luxuriously below, are then driven to lie in the upper or unirrigated part, which their droppings and manure render as fertile as the part which is irrigated—one acre thus irrigated being deemed sufficient to maintain another adjoining unirrigated acre in the best condition. After a sufficient interval, the water is again turned on, and so the process is repeated, according to circumstances—viz, the quantity and quality of the water, the condition of the land, &c., till the season for irrigation expires. From the extreme value of the pasture, and the weight of the hay obtained, it is calculated that this process, at a very small expense, soon renders the land worth at least double its former rental.

From the opposite hill-side Mr. Turner pointed the attention of the company to his own fertile meadow in the bottom, and, a short distance off, to a field similarly situated, in which was growing a scanty crop of mangolds, intermingled with swedes, which had only quite recently come into his possession, and which had been drained in preparation for the same process of irrigation. Two years ago a dog could not walk across that field; but in a very short time he expected to make it equal to his best bottom land, which was formerly in a similar condition. The three acres, properly irrigated, which they saw below them, kept the five acres on which they stood, in the way before described.

In reply to a series of questions and observations, Mr. Turner said that, practically, he had never found the water diffused by irrigation settle and swamp the land; that in relation to grass seeds, he always made a point of getting the very best; that in Devonshire there existed a great variety of soil in immediate contiguity. He could show them valleys where the land on one side would be worth £2 per acre, while on the other it would hardly be worth more than 2s. an acre. That, according to the rent of the land, he belived no man grew more beef, mutton, corn, or food than he did. Some persons said, "Oh, such a man is a good meadow farmer, such a man is a good tillage farmer, such a man is a good breeder," &c.; but he did not consider any man a good farmer who was not a good meadow, tillage, and stock farmer combined. It was the adaptation and proper and economical rotation in every department, that made the truly good farmer. (This observation gained general concurrence, as did also another, made by Mr. Turner, as follows): "Remember, gentlemen, that *the artificial watering of meadows robs no dunghill*; on the contrary, *it raises one for the benefit of other lands.*"

Mr. Mechi and other gentlemen made several observations on the use of artificial manures; in reply to which Mr. Turner generally stated that he did not profess to be a scientific chemist, nor any more than a practical man, whose practice he explained to them, and of the results of whose practice their own observation would enable them to judge; and proceeded to urge upon them strongly the advantage of availing themselves, where practicable, of the less costly fertilizing principles of water. The average cost of preparing land for irrigation varied greatly, according to the nature of the land, supply of water, &c., perhaps from £2 to £3 or more, per acre. The subsequent cost of use, &c., was but trifling; not more than 5s. a year per acre.

Some difference of opinion was expressed on the part of several visitors, as to the advantage to be gained by denying the land water in the summer, and it was urged by some that the water might with advantage be turned on after mowing.

Mr. Turner replied that in 99 cases out of 100 summer watering was found, not only to be of no use, but a positive injury; then (pointing to the water, which having been turned on into the hill side-gutters was diffusing itself over the whole meadow below, making its surface quite plashy) said, he had, in order to give them occular demonstation, turned on the water to the perhaps but slight detriment of the land, but he should be sorry to repeat the experiment. He then explained that by summer watering the land became exhausted, being pushed beyond its natural strength.

Mr. Turner expressed a general opinion that it was unwise to make such an attempt to thwart nature. One effect of summer watering would be to rot the sheep that fed on land thus watered. He remembered that many years ago, when he was but a little boy, his father bought many rams from the celebrated Bakewell, of Dishley. Now, Mr. Bakewell had a great objection to others getting hold of his breed, especially in any irregular way, and at certain periods of the year the butchers would come to buy his sheep, intending really to breed from them. In order to prevent this, a short time previously to the sale, he would irrigate his meadows from an old mill stream, turning on the sheep, and then say to the disappointed butchers, "Gentlemen, you may try to breed from my sheep if you will, but, I warn you, if you do they will have the rot."

On its being put to Mr. Turner, whether, in very dry summer weather, it might not be desirable to water artificially, he said his experience was against it. They might force grass, but to the average and permanent injury of the land.

In relation to those who were inclined to commence irrigation, he recommended them to have a man who understood the subject, to put their land into proper order. As to the levels, they should be such as to produce a gentle rippling current. To allow the water to stand still would be injurious to the land.

In reply to renewed questions, Mr. Turner said, the period of continuous watering, during the irrigation season, must depend chiefly on the condition of the land, and the goodness of the water. If the water were warm and forcing, the period would not be so long. There could be no specific rule; from one week to one month was, perhaps, the two extremes. In conclusion, he must impress upon them all, as the great value of irrigation, that every acre of land thus

watered was equal at least to the maintenance of another acre; and that every thousand acres of land, judiciously irrigated, would give an increased rental of a thousand a year by means of that irrigation. It is estimated that there are half a million of acres irrigated in Devon—which, therefore, represents an increased rental of £500,000 a year, over what the same land would fetch if it had remained without irrigation.

Letters from Prof. Norton—No. 12.

Notes of a Tour in Central New-York.

ANALYTICAL LABORATORY, YALE COLLEGE,
New Haven, Conn., Nov. 4, 1850.

MESSRS. EDITORS—It may be remembered, that in my last letter, when mentioning the various improvements made by Mr. Jos. Watson of Clyde, I referred to a specimen of marl from his reclaimed swamp, as undergoing analysis in my laboratory; the analysis has since been completed, and has given me a high idea of the value of the marls in that section, of which I suppose this to be a fair sample. It contains a remarkably large per centage of carbonate of lime, and also traces of potash, sulphuric and phosphoric acids. These last, although in small quantity, add most materially to its value, and confirm me in the opinion, that these marls are one day destined to be of immense importance in the agriculture of this region. If the present race of farmers find no use for them, or for the swamps under which they lie, they may rest assured that those who come after them, will not always labor under the same delusion.

The exhibition of stock, implements, fruits, &c. at Clyde, was very creditable, and when the hour for the address came, I was greatly surprised, it being a very rainy day, to find the church quite filled by an audience that proved remarkably attentive, and that seemed disposed to consider the subject of the address—a special agricultural education, as one which deserved their most serious consideration.

In coming up from the head of Sodus Bay, with Mr. Watson, he directed my attention to the line of the proposed Sodus canal. The excavation has been in a great degree completed, by the ingenious method of damming a stream which runs through a natural hollow in a straight line to the head of the bay, and then allowing the accumulated water to sweep down, bearing of course a large quantity of material torn from the banks with it. By a repetition of this process, a large channel has been swept out, so that little remains but to build locks, and shape the banks. This canal will drain quite an extended tract of heavily timbered swamp, which, when dry, will make farms of the very richest description.

Near Clyde, we called for a few moments on Mr. Mackay, whose nursery and selection of fruit is well worthy of a longer visit than the closing day permitted us to make; he has a considerable assortment of the rarer fruits, shrubs, and flowers, and all in a highly thriving condition.

From Clyde I went to Palmyra, on the canal, taking the packet by way of variety, in these days of railways and steamboats. I found it even slower than I had expected, and was quite content to stop at Palmyra, after a voyage of about 24 miles.

This beautiful village reminded me more in its appearance of Massachusetts or Connecticut, than any place that I saw in New-York. In company with Mr. Pardee, the active and intelligent secretary of the society, I made an excursion from Palmyra to the shores of Lake Ontario, at Pultneyville, passing through Marion on our way, and returning through Walworth. This is a superb country, with wonderful natural advantages. The cultivation is in several respects improving; there is a general air of increasing neatness about the fields. Attention seems to be paid to the eradication of weeds, on many farms. The buildings too, bear marks of improvement and thrift. Many of the farms are however, evidently running down, and I heard of some that were almost entirely worn out. The new farm houses in all this section, are very generally built of small rubble stone, faced with regular round or oval ones, brought from the shore of the lake, where they have been worn smooth by the action of its waves. This style of house seemed to me very appropriate for a farm-house, neat, warm, and solid, with a very comfortable, substantial look.

It speaks well for the farmers of this section, that in this drive of about 40 miles, I did not see a single field of corn that was topped; it was all cut close to the ground, and was uncommonly heavy. Mr. Pardee, who has extended opportunities for forming a correct judgment, thinks that the average yield of wheat per acre in this part of the country, has rather increased; though very great numbers farm on an exhausting system, they have learned to sow deeper, and thus to root the young wheat well so that it is not so liable to winter-kill. This improvement will not be a lasting one, if the farmers persist in their exhausting system, and will in that case soon cease to produce any such marked effects as it did at first.

This county is remarkable for fine fruit, and for the extent to which it is cultivated. In an address delivered to the county society a year since, by Mr. Pardee, he brought forward facts to prove that Wayne county exceeded all others east of it on the line of canal taken together, in the amount of fruit shipped for market, both in a dried and fresh state. I saw many orchards that bore evidence of care and skill in their management, and some of them were very remarkable. There was one large orchard that we visited, some ten or twelve miles from Palmyra, the proprietor of which was absent. His name I have unfortunately forgotten, and I regret this the more, as it was in the most healthy and flourishing state, of any large orchard that I ever entered. The trees were all young, just coming into bearing; the varieties being Russets, Greenings, Baldwins, and a few other standard kinds. I picked the largest Russett from one of the trees, that I ever saw. The trunks of all these trees had evidently been washed with a weak lye, or some preparation for cleaning the bark, as it was in a wonderfully smooth, silvery, thrifty state; presenting such a sight as, I will venture to say, can scarcely be surpassed in any country.

In the town of Walworth, we visited the farm and nursery of Mr. Theron G. Yoemans, and found it well worthy of attention. It is an instance of what enterprise and sagacity, may do with this land. We saw there peaches, plums, pears, apples, and cherries, all from 3 to 5 years old only, but wonderfully large for their age, and bearing most luxuriant crops of superb fruit, unsurpassed in size and quality. Mr. Yeomans commenced with but about 18 acres, on a small scale, as in my opinion every beginner should, and has gradually increased as he has improved, until he now cultivates about 50 acres. The original 15 acres, were first dressed with about 70 loads per acre of muck, and leached

ashes, in equal parts. The latter came from an old ashery, where they had lain neglected for years. This accomplished, the next step was to drain the whole tract; it lay on a hill side, and was generally considered dry. There was however in reality, a number of springs which made the ground wet and springy in the early part of the season, and in winter, so that the roots of the young trees were liable to be thrown out and lifted. His draining has been done with tiles of the horse shoe and pipe varieties, mostly of the latter, laid at a depth of three feet. They are made at Waterloo, Seneca county, by the machine imported two or three years since by Mr. Delafield. The 30 or 40 acres which have been added to the original 15, are now under process of drainage. They had heretofore been thought dry, but the drains laid have already run full of water several times, and an improvement in the land is already beginning to show itself most decidedly. Mr. Yoemans has laid 14,000 tiles this season, and is still going on.

The principal object in the cultivation of this farm is fruit, and carried on in the way that I witnessed, on such a soil, and under the influence of such a climate, it can scarcely fail of success. While Mr. Yoemans has thus commenced a liberal and enlightened system of management, he has not neglected matters of general utility, and the neighborhood bears ample testimony to his public spirit. Among other things, he has offered a premium of about 50 cts. for each shade tree that may be planted along the road side within the village limits, and shown to be healthy and thriving at the expiration of three years. In consequence of this offer, some 900 trees have already been set out, and will be well cared for during the next two or three years of course; they will then have obtained such a start, as to grow without farther care. It will be an inestimable benefit to the village of Walworth, and one which its inhabitants some thirty or forty years hence, will fully appreciate. Mr. Yoemans will I trust, excuse me for having spoken so much at length of his proceedings, but I think that such examples as his, are just those that practical farmers ought to become acquainted with.

The fields in this part of the county look older, and more carefully cared for, than the generality of those in the Eastern section. The country has been long settled in comparison with the east end, and consequently has a less rugged and newly settled appearance. Many of the fields however, seem to be much worn out by a defective system of cropping, and nearly all show need of the various remedies which Mr. Yoemans has so abundantly applied to his land. The cultivation here is as I have said considerably neater, and the roads cleaner, than in the other end of the county; the houses are also generally larger, and more substantial. These are however simply the advantages of an older country, and in my opinion they will have to work hard in order to maintain their superiority, as their rivals are pushing on rapidly in this friendly strife. Yours truly, JOHN P. NORTON.

KIRTLAND'S NEW CHERRIES.—Dr. Kirtland states that out of the new cherries which he has originated, there are some thirty or forty which will range as high as the American Heart. None are as early as the purple Guigne. The *Doctor*, one of the earliest, he states, comes in with the early White Heart. We have found it a trifle earlier.

Protection to Wool-Growers.

EDITORS CULTIVATOR—My article in the September number of the Cultivator on the subject of Foreign and Domestic wool, was written amid the pressure of other business, in great haste, from a mass of facts on the subject, which in private correspondence and official documents had been accumulating on my hands, during the many years I have been connected with the wool question; and here, permit me to say, a question, whether we regard the immense amount of the investment or the numbers interested, unsurpassed in importance by any single subject that can be presented to the consideration of Congress in the adjustment of a tariff. Whether such an event is to happen immediately or at a distant day, it is a bad policy, to wait till the horse is stolen before you lock your barn, as was the case in 1842.

In that article, (which an able writer in your November number over the *assumed name* of Titrius *a wool grower*, has been pleased to notice with great courtesy,) I endeavored to embody a mass of facts which I deemed vitally essential to a fair adjustment of a practical and useful tariff on wool. How necessary a knowledge of the most simple facts is, to the majority of politicians and professional men. who compose Congress, is aptly illustrated by the fact, that Congress in '42 regarded flax-seed and linseed as two distinct articles, and accordingly in the tariff, made them subject to widely different rates of duty, which ridiculous ignorance, any unlettered farmer could have enlightened.

Titrius, notwithstanding his great interest in the wool question and confessed obligation to me, seizes upon a purely incidental remark on the subject of Scotish Black faced wool, (which is a mere incident with the grower, the mutton being the main object) and ascribes to me the advocacy of a sentiment conflicting with the whole tenor of my article which I never have and do not advocate, to wit, that of discriminating duties on wool according to the different fabricks, into which it may be manufactured. This would be impracticable, if not impossible, as the wool of the same fleece, is often made into fabricks of very different value with wool of an entirely different character. Had Titrius written over his own name or addressed me a private letter, as many wool growers have done, I have no doubt with his kind feelings, the fervor of his gratitude and deep personal interest in the subject, we might have arrived at a mutual good understanding, without his giving battle to a man of straw, or my appearing again in print.

As I have nothing to do with the duties on fabricks into which wool may be manufactured further than their manufacture creates a demand for wool, I will now simply say, that Titrius is mistaken five per cent in the duty on the fabrick to which he alludes, and notice more particularly his last paragraph, in relation to the struggle in the passage of the tariff 1842, on the wool clause. With this struggle I was not an entire stranger or a careless and uninterested observer. The samples of wool used in both houses of Congress and before the committees, to illustrate the subject were furnished by me, in relation to which Ex-Gov. Slade, then in Congress, in his letter to me says, "they *were used to good advantage*" before the committee of ways and means, who were induced to report an amendment to their bill before the committee of the whole in the house, of five per cent duty on coarse wool costing less than seven cents per lb. &c." Also the facts quoted in behalf of the wool grower in both houses were credited to the paper I then had the pleasure to edit.

This paragraph appears to me to originate in a

misapprehension of the nature of the struggle in '42, and calculated to prepare the way for further injustice to the wool grower; in short, to be just such as a defeated advocate of the now exploded maximum principle, would pen in the last resort, to secure the next best object to the advocates of free trade in wool—to wit: a low, indiscriminate duty on wool, so high, as nearly to exclude the coarse hairy wools which we do not grow, yet so low, as to admit the whole mass of *rival wools*, at a cost here which will enable them to control the price of domestic wool in the home market; too low for the purposes of revenue, incidental or direct protection, and far below what the farmers of the country have a right to demand in return for the payment of 16-20ths of the millions raised by the tariff to support the government. It is not to be winked out of sight that, 82-100ths of the whole population of the United States are agriculturists, and that no class consume more dutiable articles, according to their numbers and the amount of their individual business, than they. They are the principal consumers of all the protected products of our manufacturers, yet no class on account of the great superabundance of the products of our agriculture, receive so litte encouragement or aid from the tariff. Then let Congress do all it can for them in a tariff in this *vital* matter of wool, and go even beyond the revenue standard, (even the most scrupulous for justice's sake, need not hesitate,) they will still labor at the shortest end of the yoke and receive a mere pittance from the general government compared to the aggregate amount of their contributions to its support.

Titrius says—it was the attempt to discriminate between the different kinds of wool to be applied to different objects, which produced the greatest mischief to the wool grower in 1842.

Now, I say there was no such attempt or issue in the passage of the tariff of 1842, as Titrius believes, and those who believe it do not and did not understand the game the advocates of free trade in wool were playing, under the guise of the maximum principle, adopted in the tariff of 1832—which admitted all wool costing abroad eight cents or less per pound, duty free. So little was then known on the subject out of the circle of importers and manufacturers, that it was not even imagined in Congress or out of it, that this tariff would virtually establish *free trade* in wool, but when I established the fact in 1841, that fourteen and a half millions out of a little rising fifteen million pounds of wool, were imported duty free, supplanting every grade of domestic wool in our own markets, the wool-growers were alarmed, the agricultural press came to the rescue, a few members of Congress caught the glimmer of the new light, a struggle arose between those who wanted free trade in wool and the wool-growers. The whole issue was made up on the maximum, which drew no line of discrimination between the kinds of wool and the fabrics into which it might be manufactured, but between *free trade* and *protection*. So great was the influence of adverse interests, and so small the information on the subject in Congress, that all the bills, when presented to Congress, adopted a maximum, high enough to establish virtually, free trade in wool. However, the Committee of Ways and Means, at the last moment, imbibed a little light, and were induced to report an amendment to their bill, subjecting *coarse* wool coming under their maximum to five per cent. duty. The word COARSE, which was not in the tariff of 1832, with the provisos in the bill, it was contended by the advocates of free trade in wool, would be an abundant security to the wool-growers, while *they* contended the word *coarse* and the proviso, would be inoperative in the construction of the act, and the sheep husbandry in the United States would progress from bad to worse, under the proposed tariff, all of which has been too sadly realized.

Thus the whole struggle in 1842, was for substantial free trade on the one side, and just and equal protection on the other. The free trade in wool prevailed, losing no ground in the struggle save the trifling amendment of the Ways and Means. Well, the tariff of 1842 went into operation. From the ingenius phraseology of the bill, the word COARSE proves to be all a humbug, and without meaning —over 29-30ths of all the wool imported, came in subject to five per cent. duty—about one-eighth as much as the duty on woollens. The importations rose up by 1844 to nearly 25,000,000 pounds, and in 1845, to rising 28,000,000 pounds.

Now I would ask what there is in all this that has even the semblance of a discrimination between different kinds of wool to be applied to different objects? Does the issue on the maximum, for its rejection, reduction, or the substitution of an ad valorem duty as high on wool as woollens, establish the fact? No such thing. The whole issue was free trade or not. Certainly the maximum could make no such discrimination, when all the South American wool could be purchased abroad from one to four cents per pound less than the maximum of seven cents. It is true, that the friends of the wool-grower in Congress, with a faith founded in darkness, thought if they could reduce the maximum, they could subject more *rival wools* to the higher rate of duty established in the bill, but they soon found that they were completely over-reached, and that there was no fact in commerce better established, than that the *coarse, hairy wools* of Crimea, Odessa, Calcutta, &c., *cost the same abroad* as the fine and beautiful wools of South America, east of the Andes.

This fact was established beyond contradiction, in my last; having *then* reliable information that a project for a new tariff had been made at Newport, R. I., by certain eminent politicians, about twelve months previous, designed to be substituted for the present tariff, at the first convenient opportunity, by which free trade in wool was again to be established under the guise of the maximum principle; I set forth this fact distinctly and beyond doubt, so that all could see that a maximum could have no office in a tariff on wool, save its old office of humbug, deception and ruin.

That I made a discrimination between *rival* wools which supplant our own, and the coarse hair wools, which do not, is true, in order to show that the maximum cannot be applied to either, as a rule of discrimination between coarse and fine wools, and also, that unless such a discrimination as this is made in a tariff, it will be found to be impracticable, as it regards both the revenue and incidental or direct protection.

Titrius, would not subject fine and coarse woollens to the same rate of duty—say $2 per yard. This would exclude the coarse fabrics, costing $1.50 and under per yard, (the article most wanted,) and be no restriction on the importation of broad-cloth worth $5 or $10 per yard, and would defeat the purposes of revenue. This is precisely the case with the present indiscriminate ad valorem of 30 per cent. on all wool. If it is a fact, I believe it does not admit of a doubt, that the coarse hairy Crimea and the Buenos Ayres cost abroad the same, (though the Buenos Ayres will produce three times as much as the Crimea,) then both pay the same amount of duty per pound, which is as absurd as to subject a $10 and

$2 broad-cloth to the same amount of duty per yard.

Now, I would ask Titrius, as a wool-grower, what rate of duty he would put on the *rival wools* of Buenos Ayres, Montevideo, Cordova, &c., rivaling every grade of wool grown in the United States, and coming to the cards from 12 to 20 cents per pound cheaper than our domestic wool, and costing about six cents per pound? Why, he would answer me as did a distinguished wool-grower and member of the present Congress—why, sir, 100 per cent. would not be equal in its effects, to the duty on woollens. Now apply this rate of duty, or any just rate of duty on fine or rival wools, to the coarse hairy wools, and you exclude their importation at once, and destroy a demand for our long worsted wools manufactured with them in about equal proportions. You defeat all revenue from this class of wools, and discourage the introduction of the large long-wooled mutton sheep, very desirable in our more populous States, where mutton as well as wool is an object with the farmer. *Now, on the other hand*, if you adopt a low, indiscriminate ad valorem duty, *so low* as to raise revenue from the importation of these coarse hairy wools, you will flood the country with all kinds of wools and ruin the majority of the sheep farmers in the United States. This would not be true, did the price of wools abroad generally imported, correspond to their quality, value and fineness, as imported articles generally do.

Hence, in my humble judgment, we are reduced to the necessity of either a general ad valorem duty on all wools, on *their home valuation*, or two rates of ad valorem duties corresponding *to the qualities of the wool* and the degree to which they compete with and rival our domestic wools in our own market, or else wool-growing in the United States will continue to be, what wool-growers *know it has been, a bad business.* I am, with great consideration and respect, your obedient servant, H. C. MERIAM.

North Tewksbury, Nov. 7th, 1850.

The Horticultural Department.

CONDUCTED BY J. J. THOMAS.

Successful Treatment of Young Trees.

We gave, last spring, some account of the successful management of newly transplanted fruit trees, furnished by JONATHAN TALCOTT, of Rome, N. Y. Not one tree in a hundred was lost, and the growth of many of the shoots on the apple trees the first season, was 15 inches to 2 feet. This success was mainly owing to large holes filled with fertile soil; careful transplanting; shortening the shoots at the time on the tops of the trees; and clean, enriching, and mellow cultivation, and mulching. He has recently furnished the following additional remarks on the treatment of his young orchards:—

"Last spring the ground was plowed and planted to hoed crops, the manure about the trees was spaded in, and they have been hoed twice. The results have been most promising for a beginner, and encouraging to those in this vicinity who are setting out fruit trees. I find they have grown from *one to more than three feet* the present season, forming fine heads. When I came to the conclusion to set out an orchard, I made up my mind that I would take care of my trees, and have endeavored to do so to the best of my knowledge. Thus far the result of the experiment has been satisfactory.

"I have just been scrubbing the trunks with soft soap diluted with water, tying them up for winter, removing the eggs of insects, &c.

"About 100 trees set last spring have made an average growth of about 15 inches each. A part were mulched with oat straw, a part with coarse straw manure, and another portion were mulched at all. The result was most conclusive in favor of the mulching."

The Best Strawberries.

The experiments which have been made in all parts of the country are greatly assisting in the determination of the best sorts for general cultivation. The results of different cultivators under the various external circumstances of soil, locality, &c. must always be interesting.

LEWIS F. ALLEN, of Black Rock, N. Y. remarks in the Horticulturist, "In the plantations of an acre or two which I am about making [founded on previous trial] my chief stock will be the *Large Early Scarlet, Burr's New Pine* and *Rival Hudson*, with a few *Hovey's Seedlings*." The Large Early Scarlet, he says, is "the best berry *for a crop*, probably, taken altogether, that we have." Twelve square rods, with ordinary care and some drawbacks, gave 260 quarts. Hovey's Seedling, "coarse in flavor, 'a tolerable bearer,' not fit for a crop." Boston Pine, a good fruit, but stem too short. Burr's New Pine, "splendid, early, prolific, highest flavor." Rival Hudson, "the most prolific—the most beautiful *growing* berry, on a *high* stem—fine rich flavor." Black Prince, "color bad—flavor insipid, or sour."

H. E. HOOKER, an extensive and skilful cultivator at Rochester, says, "The best to *my* palate, are *Burr's New Pine, Large Early Scarlet* and *Hudson*; and for a late berry, *Crimson Cone*; but tastes differ." Boston Pine is pronounced very productive, but inferior in flavor.* Black Prince, the same. Hovey's Seedling, large, beautiful, of second quality. Burr's New Pine, large, beautiful, fine, productive. Large Early Scarlet, very productive, one of the best, good for marketing. Hudson, good flavor, firm, excellent for market. Crimson Cone, beautiful, fine flavored, late, very vigorous."

At an examination of 37 sorts made at the grounds of L. C. EATON, of Providence, R. I. by a number of gentlemen, the following were selected as the best, viz: *Hovey's Seedling, General Jaqueminot, Jenny's Seedling, Burr's New Pine, Rival Hudson*, and *Hudson Bay*. The New York Hudson Bay, the Cincinnati Hudson, and the Hudson Bay of Rhode Island, were pronounced distinct, the latter being decidedly the best. The General Jaqueminot was regarded as unrivalled,—large, firm, hardy, vigorous, productive—fruit stalk high and strong.

DR. KIRTLAND, of Cleveland, Ohio, states that *Hovey's Seedling, Willey, Burr's old Seedling*, and a variety of *Hautbois*, can be so managed as to give an abundant succession of fruit for five or six weeks. He remarks, "Experience has satisfied us that four-fifths of the varieties which have been introduced to public notice, are in nowise superior to a few old favorites, and many are entirely worthless in this vicinity."

G. W. HUNTSMAN, well known as a successful strawberry culturist of Flushing, L. I., places *Burr's New Pine* at the head of the list, as being "decidedly the most desirable strawberry in cultivation." He ranks *Hovey's Seedling* next; then

* How tastes differ—a person, accustomed to eating the best strawberries, preferred, this year, the Boston Pine for its excelling flavor, even alongside Burr's New Pine and Swainstone.

Boston Pine and *Large Early Scarlet;* and the *Crimson Cone* as a valuable market fruit.

Thinning Fruit.

The New England Farmer observes in relation to thinning fruit:—"One peach grower informed us that he had taken off two-thirds of his peaches, and as they increased in size, and appeared too thick on the trees, he said he was sorry that he had not taken off one half of the other third. One man complained to his neighbor, that a certain variety of the peach which his friend had advised him to cultivate, was a poor bearer. 'Stop your complaint,' was the reply, 'until you sell your fruit.' He raised on one tree three dozen of peaches, sold them at two dollars per dozen, and was satisfied."

This, it is true, was an extreme case, but the evils of overbearing, contrasted with the benefits of thinning, can only be understood by actual trial. The cultivator may be aware that, by reducing the number, one hundred specimens may fill his basket, where two hundred were required from an overloaded tree, but until he actually tastes and compares the two products he cannot appreciate the incomparably superior quality of the former.

Many are deterred from thinning their fruit by the slow and tedious nature of the operation; but a very expeditious way more particularly applicable to the peach, is to *shorten in the shoots*—cutting off one half or two thirds of all one season's growth. Where trees have been neglected for several years, and are beginning to extend their branches into long bare arms, the shortening back should extend to larger portions of the branch, until the tree is brought into a more compact shape. We have on former occasions more particularly pointed out the nature of this mode of treatment, but we wish now to urge the necessity of its timely performance. The earlier in winter it is attended to the less will be the liability of its omission. We have found it to succeed quite as well even if performed by mid-autumn as when left till spring.

Horticulture at Cincinnati.

At the same time that the American Pomological Congress at Cincinnati did not prove to be quite so successful a convention as had been hoped, the exhibition of fruits, &c. by the *Horticultural Society* of that place, appears to have been of a very imposing character. The following account is furnished by the Genesee Farmer:

The brilliancy of this exhibition took us quite by surprise. We expected something fine—we were aware that the most liberal arrangements had been made, and that there was abundant material in that city and vicinity, for a grand display; still, as we have already said, it took us completely by surprise, so admirable was it in all its parts. We felt fully compensated for our journey, with the gratification it alone afforded us. We have seen some of the best shows that Philadelphia or Boston has produced; and although this was defective in the display of pears and foreign grapes, yet, as a whole, considering the articles exhibited, the arrangement, &c., we consider Cincinnati up to, if not a little ahead of either; and this is saying a good deal.

The show was held in a splendid hall nearly one hundred feet long and fifty feet wide. On either side was a table, the whole length covered with fruits—not *little, shabby, half grown specimens one of a kind*—but superb dishes of those magnificent golden and crimson fruits of the west—Fall Pippins as large as a man's head, and peaches that would almost weigh a pound. What a display of fruits!* The "Queen City" and the "Mighty West" might well be proud of it. Then, in the center of the room were three tables, with a walk between each, filled with flowers, flowering plants, and floral designs. The center table was appropriated to the design and taller plants. At the end of this table, just opposite the entrance, was a decorated arch, supported by two columns, mossed and ornamented with flowers, and with nuts of the Buckeye. The words "Buckeye welcome" were tastefully wrought on the arch, with the nuts, and on the top was the American eagle. This tasteful object was the handiwork of the Misses ORANGE, and sold, we understood, for the sum of $50, at the close of the exhibition. There were many other very beautiful designs, by Mrs. WM. HEAVER and others. At the farther end of the room we noticed a villa residence in miniature, the grounds all laid out and planted with much skill and taste; and, just opposite, a very pretty design of a flower garden, laid out and planted. The two side tables were occupied with smaller plants, dahlias, &c. Messrs. JACKSON, HEAVER, SAYERS, and others, exhibited pot plants, many of which were new and rare, grown in the best manner. Indeed, we think they would do credit even to a Chiswick fete. A better collection of pot plants, and better specimens, have, we are very confident, never been exhibited together before in this country.

The liberal management of the Society brought out this grand display, and it was well rewarded. We were glad to see the great hall filled—thronged—evening after evening, and every visitor go away delighted. *One thousand dollars* were received at the door, and six hundred dollars were received at the sale, making $1,600 receipts. We congratulate the officers and members of this very excellent Society on the success which has crowned their efforts on this occasion. It affords them great encouragement for the future.

Fruit Memoranda.

GRAFTING OLD APPLE TREES.—Some persons, I have noticed, in grafting old trees put in as many scions at one time as they think the tree ought to have. The next year they trim off all the original branches and leave the bare limbs with one year's growth of the scions at the ends. This causes a rapid growth of the scions, rendering them liable to be broken off by the wind, and as they cannot take up all the nourishment furnished by the roots, shoots start out all over the trees which from their number are very troublesome. *Thomas's American Fruit Culturist* shows a better way, which is, to begin at the top and graft a third of the tree a year till it is completed. This does not throw all the nourishment of the tree up to the scions at once; and they start better, from not being shaded by the foliage above them, when the top is grafted first. From the same source we learn, that "instead of cutting off large branches and grafting them at once, it is better to prune the top in part which will cause an emission of vigorous shoots which may be grafted with ease and success." I have seen trees that had begun to

* Having been unexpectedly prevented from seeing this exhibition, the writer has been favored with a glance at some of its specimens, through the kindness of A. H. ERNST and Dr. S. MOSHER, by the present of a fine collection of fruits, some of them quite exceeding in size and beauty any to be found even in the fertile regions of Western New York. ED. CULT.

decay, grafted on the old branches and the failure showed the folly of such work.

PRUNING GRAPE VINES IN SUMMER.—It is thought necessary by some, to cut off the ends of the shoots of grape vines in summer, in order to facilitate the growth of the grapes, or that the sun's rays may fall directly upon them. The following from the *Fruit Culturist* will set this matter right. "The summer treatment of grapes consists chiefly in thinning the shoots where there is danger of the leaves becoming crowded; thinning out the bunches; and, on exotic sorts, thinning out freely the berries. The frequent practice of nipping off the ends of the shoots, just above the bunches, when the grapes are as large as a pea, lessens their subsequent growth. For all fruits grow and ripen best when fed from a good supply of well grown but not crowded leaves, hence the foliage should not be lessened, nor the shoots shortened, until they interfere with each other's full development." p. 393.

THAT SEEDLING GRAPE.—In the Cultivator for 1844, page 382, is noticed a seedling grape obtained of G. B. Emerson, Esq. of Boston. It is represented as about the size of an ounce bullet, perfectly hardy, the flavor richer than the Isabella, and ripening about a month earlier. Such a grape would be very desirable for this climate. Do any of your readers know any thing about this grape or where it may be obtained?

ANOTHER SEEDLING.—A gentleman of this town has a grape vine which sprung from a raisin seed. It is now about five years old, apparently hardy, and, I should think, a slow grower. It has blossomed, but never fruited. It is uncommon to raise vines from foreign seed, in this part of the world, at least, and if the owner of *that* vine expects it will ever ripen fruit, I "rather guess" he will be mistaken, unless he gives it some kind of protection,—and then he may. W. L. EATON.

Apple Trees from the South.

Fruit trees, of most kinds, taken from nurseries along the sea-board and replanted in Vermont, have, in most instances, met with ill success; so much so, that all "Southern trees" have been regarded with disfavor. But the fact is now well established, that those trees re-set in these parts, which were propagated in the nurseries on the banks of the Hudson, are hardy, and thrive better than most of the trees from our nurseries.

Mr. HENRY C. HUNT, of New Haven, has a fine orchard of trees from the Hudson nurseries that are equal in hardihood or thrift to any standard trees that I ever saw in any part of the State of New York, and superior to any that I have seen reared in this State.

Most of his standard trees, set last spring, have this season grown two feet *from the end bud*, and older trees many of them over three feet. In fact, these trees commence bearing four years from the graft, and six from the seed. From one entire lot of 640 southern trees transplanted last spring, not one has died.

Mr. Hunt is now forwarding over two thousand from the Hudson river nurseries on sale. Such choice varieties of beautiful trees as he selects "go off like hot cakes."

BORERS, MICE AND SHEEP GIRDLING.—Mr. Hunt's method of protecting trees from the depredations of field mice and the borer, is worthy of notice. He procures sheet lead, taken from old tea chests, at a nominal price, cuts into strips, and winds around the body of each tree close to the ground. This will last for many a year. It is simple, expeditious, and sure to keep off the "varmints."

A little hillock of dirt is raised around each tree, enough to cover the bottom of the lead.

Without protection, the borer is the worst enemy of the insect tribe, to the apple, peach, plum, or quince, that we have to contend with.

I have successfully prevented sheep from girdling my trees by the application of their own dung, quite fresh, plastered upon each tree, as high up as they can reach, one boy can pass over several hundred in a day. *Weybridge, Oct.* 18, 1850. S. W. JEWETT.

Expeditious Budding.

MESSRS. EDITORS—Under the above head, I see it stated in the Cultivator for June 1850, page 207, that the Messrs. Overmans of Canton, Ill., and another man in western New York, are at least supposed to be the greatest "Live Budders" ever seen or heard of, they having set about 1,650 buds each in a day, (though it is not stated how many were employed to tie them in;) and this in a region where to "Strip off a bud and fling it at a tree was quite sufficient to have it take." Although we live in a State where the soil and climate will not produce such a rapid growth as in Illinois, yet we have some trees and some "Live Budders" here. My oldest son, now in his 21st year, set 2,300 buds, and prepared his own stocks, on the 22nd of Aug. 1850; and my second son, now in his 17th year, tied them all in; and unless some two persons can be produced, who can bud and tie in 3,000 in one day, you may at least hear of one live budder who can go *over* the Messrs. Overmans'. *Cornwall, Orange co., N. Y.* CHAS. HAMILTON.

Horticultural Items.

THE CURCULIO.—S. W. Cole, of the New England Farmer, says that he lately observed an orchard of plum trees in Brooklyn "bending beneath their heavy and growing load of fruit," and on inquiry he found that the trees were jarred morning and evening, the curculios being allowed to escape, and as was supposed, flew away. Whether his neighbors suffered any the more for this expulsion, we are not informed; but although this is an easier way than to catch on sheets and kill them, it cannot be so sure, as a living insect may return, but if killed there is no possibility of any further injury on his part.

TRANSPLANTING EVERGREENS.—We have urged the importance of always, where practicable, removing a large mass of earth on the roots, and where this cannot be done, to keep even the surface of the denuded roots constantly moist till they are again replaced in the earth. This is corroborated by a statement from G. Jacques, who transplanted in the spring fifty two young hemlocks, (a very difficult tree to remove successfully,) on a *rainy* day, all of which are alive and growing.

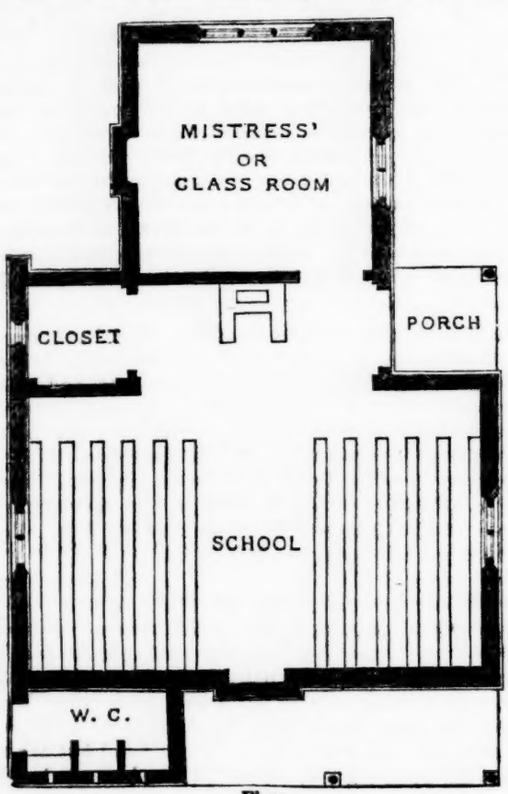
THE KEW PALM HOUSE.—This celebrated and magnificent erection, built in 1848, is 362 feet in length and 66 feet high; the whole frame-work and sashes are of cast iron, glazed with 45,000 feet of glass. It contains lofty palm trees, huge clusters of golden banannas, cocoa nut trees, and other large tropical productions, while the foliage of cinnamon and camphor scent the atmosphere; "and but for the glass roof that you see, instead of the sky, overhead," remarks the editor, who visited it, "you might believe yourself in the West Indies."

DESIGN FOR A COUNTRY SCHOOL-HOUSE.

Rural Architecture.

Country School-House.

It is a singular inconsistency, that, notwithstanding the great value which our people profess to attribute to common schools, the buildings which are devoted to them, frequently evince the utmost neglect. In passing through the country, one cannot fail to be struck with many disagreeable examples of this kind. Sometimes the school-house is planted within the limits of the highway, and to escape the charge that it incommodes the public travel, it is, perhaps, perched upon some high bank, or precipice, entirely inaccessible to any vehicle. In reaching it, the children realize such a foretaste of the toils incident to climbing the "hill of science," that it is no wonder they become discouraged. In other instances the house is placed in the bleakest situation of the neighborhood, exposed to the most violent winds and storms of winter, and the most intense sunshine of summer; not a tree breaks the force of the blast, or intercepts the scorching ray. The building itself has not one inviting feature. It stands on four piles of stones—one at each corner; the underpinning having never been finished, there is a free circulation of air under the floor. It never had any paint; there are no blinds to the windows; sometimes some calico or paper is hung up as a screen to *half* the window; but more frequently the only protection of this kind, is some bushes with the leaves on, which the "mistress" has fastened into the window-frame. If a certain necessary appendage to the school-house has ever been erected, its situation and condition are such as to outrage decency. Half the boards are torn off, it has no door, and is so near the public road that it might well be complained of as a nuisance.



Floor.

Such are too many of our country school-houses. But we are happy to know that a reform has commenced. Public school-houses, tasteful in design, and convenient in arrangement, have been erected in many places, and we hope the improvement will speedily spread over all parts of the country.

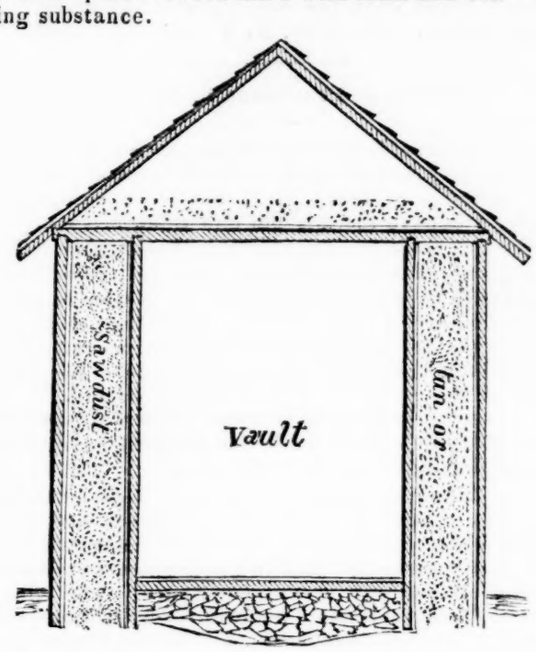
The design here given was modified by Mr. DOWNING, for the *Horticulturist*, from an English work on school-houses, by KENDALL. It represents a small school-house, in a style admirably suited to harmonize with rural scenery. It might be built of wood for $600 to $700. If not exactly copied, the design would afford some excellent hints. The exterior would have an agreeable effect if adopted for a small country church

The Farmer's Note-Book.

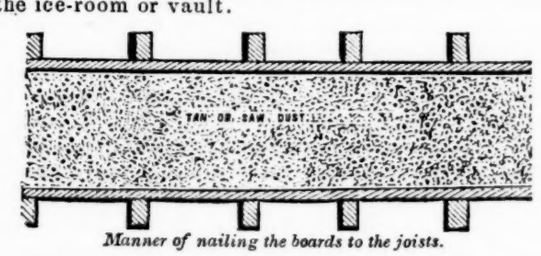
Ice-Houses.

In answer to several inquiries, we again insert the accompanying cut of an ice-house above ground. It was originally furnished to the *Horticulturist* by N. J. Wyeth, a celebrated ice merchant of Cambridge, Mass., who describes it as follows:

An ice-house above ground should be built upon the plan of having a double partition, with the hollow space between filled with some non-conducting substance.



In the first place, the frame of the sides should be formed of two ranges of upright *joists*, six by four inches; the lower ends of the joists should be put into the ground *without any sill*, which is apt to let air pass through. These two ranges of joists should be about two feet and one-half a part at the bottom, and two feet at the top. At the top these joists should be morticed into the cross-beams which are to support the upper floor. The joists in the two ranges should be placed each opposite another. They should then be lined or faced on one side, with rough boarding, which need not be very tight. This boarding should be nailed to those edges of the joists nearest each other, so that one range of joists shall be outside the building, and the other inside the ice-room or vault.



Manner of nailing the boards to the joists.

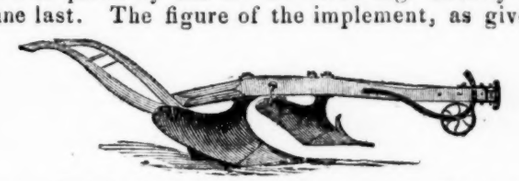
The space between these boardings, or partitions should be filled with wet tan, or sawdust, whichever is cheapest or most easily obtained. The reason for using *wet* material for filling the space is, that during winter it freezes, and until it is again thawed, little or no ice will melt at the sides of the vault.

The bottom of the ice vault should be filled about a foot deep with small blocks of wood; these are levelled and covered with wood shavings, over which a strong plank floor should be laid to receive the ice.

Upon the beams above the vault, a pretty tight floor should also be laid, and this floor should be covered several inches deep with dry tan or sawdust. The roof of the ice-house should have considerable pitch, and the space between the upper floor and the roof should be ventilated by a lattice window at each gable end, or something equivalent, to pass out the warm air which will accumulate beneath the roof. A door must be provided in the side of the vault to fill and discharge it; but it should always be closed up higher than the ice, and when not in use should be kept closed altogether.

Michigan Sod and Sub-soil Plow.

It will be recollected that this plow received a special premium, equal to the highest offered, at the trial of plows by the N. Y. State Ag. Society in June last. The figure of the implement, as given



in our October number, represents it as first constructed. The accompanying cut shows it with several improvements which have been added. The form of the forward share has been somewhat altered, and a cutter attached to the share, substituted for the former lock-coulter. An improvement has also been made in the attachment of the plow to the beam, and in the gearing belonging to the wheel. Newell French, Rome, N. Y., is the proprietor of the patent for the above plow.

Preparations for Winter.

Such preparations for winter as have not already been made, should be attended to without delay. Domestic animals should be provided with comfortable shelter. This is a duty enforced by the obligations of humanity, as well as a matter of policy in a pecuniary view. The heat of the animal system must be kept up to about 100°; the substances which supply this heat are taken as food—they are the *fuel*, and the colder the atmosphere by which the animal is surrounded, the greater will be the amount of food required to sustain it. Animals should be kept dry, in winter. A cold, drenching rain is more injurious than almost any fair weather to which they are exposed. Moisture is rapidly evaporated, and every particle of water that is thus carried off, takes with it a certain amount of heat. This explains why animals are so likely to "take cold," as the expression is, by exposure to dampness under a low temperature. The heat is absorbed by the vapor, till the cold strikes through the system to the vitals.

Farmers that have not already suitable buildings for their stock, may readily make those which will serve for a while. Sheds for sheep may be made of boards, rails, or poles. If the latter are used, they may be thatched with straw, or with hemlock, fir, or cedar boughs; and by making the sides and ends double, with a space of six or eight inches between and filling the space with straw, they will afford good protection.

Vegetables which have been stored in cellars

should not be kept too much from the air. They are very likely to rot from heating. Windows should be kept open until the vapor is seen to congeal inside the apartment, and even after that, it will be advisable to open them occasionally, in mild weather. If the common English turnip has been grown, it should be put where it can be fed out early, as it is of but little value after the first of January.

Every farmer should have a hay or straw-cutter. Clover hay will be consumed with much less waste by being cut—the stems and leaves are then all eaten together. Cornstalks should also be cut; cattle eat a greater proportion of them in this form than when given whole, and what they do not eat, is left in a much better condition to go into manure. Cut in small pieces, the spongy pith is exposed, and readily absorbs a large amount of liquid. If thrown whole into the heap, they do not rot by spring, and are quite a hindrance in loading the manure. If grain or meal is to be fed to stock, it should be mixed with cut hay or straw. It will be better digested and will go further.

Stock should not be pinched the fore part of the winter. If they must be put on short allowance, it had better be done at the last end of winter, as they will then have to be kept poor less time. But with the general abundance of forage the present season, there will, with proper economy, be no necessity of any stock suffering for food.

Wood and timber should be cut as soon as practicable. It is inconvenient working in deep snow; neither men or teams can do as much work as when the ground is bare or only covered with snow enough to make good sleighing. When there is a great depth of snow, there is much more waste. The stumps are cut higher, and many of the smaller branches are left, which would otherwise be saved. Forests should be cut clear, if it is intended that they shall grow up again. If the whole growth is taken off smoothly, at once, the new crop will start thick and grow evenly.

Sleds should be got ready for use at a minute's warning, for none can tell how soon the snow will fall, and the first that falls of sufficient depth, should be improved. Implements not in use, should be housed. They should not be all tumbled together in a heap, "as the manner of some is," but put up in order, each in its place,—so that any one could be reached whenever wanted—even in the dark.

Stones for walls may be dug till the ground becomes hard frozen, and if the smaller ones are put in heaps, and the larger ones raised up by "blockings" so that they will not be fastened to the ground by frost, they may be moved with the first snow, on a "stone boat" or sled, to where they will be wanted.

Leaves for litter and manure may be gathered to good advantage along the borders of woods. The wind often collects them in considerable quantities near fences. Taken while they are dry, they make the best bed for a pig that he can have; and when so broken up that they are no longer fit for this purpose, they will be the best manure for radishes, early cucumbers and melons, or potatoes, that can be applied.

Large Wheat Crop.

EDS. CULTIVATOR—I have noticed several accounts of large yields of wheat in various places, but I have seen no statement of yields that would compare with a yield from six acres, harvested by Mr. William Hotchkiss, on his farm one mile east of this village. He harvested and thrashed *three hundred and eighty-five and three-fourth bushels;* a yield of *sixty-four bushels per acre.* The wheat was of the same variety as Mr. Cook's of Lima, (Soule's,) and was drilled in with a drill invented and made by Mr. Abbott, of Lockport in this county.

Mr. Hotchkiss has taken the premiums at our town and county fairs, and will probably be a competitor for the State premium. He has affidavits to establish facts as herein stated. I think he would be a successful competitor at the World's Fair, as I have conversed with several intelligent farmers from Old England, who say, they never heard of such a yield from the same number of acres. A SUBSCRIBER. *Lewiston, N. Y., Oct. 14th,* 1850.

American Provisions in England.

A considerable trade has been carried on between this country and Great Britain, for several years, in the articles of beef, pork, butter, cheese, &c., and we believe there is but one thing necessary to make this trade more extensive and profitable. The thing needed is an improved quality of the articles. In regard to American cheese, for instance, there would be a very large demand by the English people at fair prices, if the article would bear a comparison with the best of their own manufacture. The same remark will apply to pork, hams and butter.

The following extracts from a review of the provision trade at Liverpool, for the past season, we take from the *Mark-Lane Express*:

CHEESE.—The bulk of the early imports having turned out fine, very good prices were realised, leaving a fair margin of profit to the merchant; but later arrivals proving deficient in quality, were very difficult of sale at any reasonable figure. The consequence was that many importers resolved on holding, and thus we had an accumulation of stock, all of ordinary or inferior character, and which, from deterioration of quality, had eventually to be forced off at very ruinous rates. Indeed, several parcels were returned to New York, in expectation of finding a better market there; in which hope, however, the owners were disappointed. At the end of the season a few lots of very inferior old, and some of the earliest new, came forward, and were sold at prices ranging from 5s. to 30s. per cwt. [or about 1 cent to 6¼ cents per pound.] The recent imports of the latter have, we are glad to say, proved of prime quality, and have brought high figures, say 40s. to 44s , and in one case 46s. per cwt. [about 8¾ to 10 cents per pound;] rates which, we believe, are pretty remunerative to the importer. At present we have a good demand for all such cheese; and although perhaps these prices cannot be counted upon for any length of time, still a really fine article will always command a ready market here at rates corresponding to the value of English; whilst we believe ordinary and inferior American will, during the present season, be more unsaleable than ever. From all we can learn we conceive the make of English will not reach the large production of last season. The imports of the past year have been about equal to those of the preceding.

HAMS.—We regret that we cannot report any improvement in the quality of American hams generally; the trade during the whole of the season has consequently been of a very dragging character, and prices have ruled much lower than even last season's. Until some amendment in the cure can be effected, we cannot expect a different result, and would therefore refrain from recommending their importation.

Renovation of Worn out Lands.

H. K. Burgron Esq., of Jackson, North Carolina, has been very successful in reclaiming the worn out lands of the section where he resides. He has furnished for the agricultural part of the Patent Office report, an account of his mode of improvement, by which he has doubled the product of Indian corn, and increased the yield of wheat in a still greater proportion. The following are the principal points in his system of culture:—

If the "broom straw," in which these waste lands always grow up, retains any sap, by which, when turned under, fermentation will ensue, and cause the straw to rot, let the land *as it is*, be plowed with the largest size plow, drawn by three or four horses, running as deeply as possible—say not less than ten inches—and turning everything under. If the straw has no sap, burn it off, and plow as before. If possible, follow each plow with a subsoil plow, and go 6 or 8 inches deeper. This will make the stiff clay, which almost everywhere underlies our land, more open to the genial influences of the sun and air, and enable it to get rid of the surplus water of winter, and heavy rains in other seasons of the year.

About the middle of June, following when the weeds are about half grown, and before they have formed their seeds, sow the land broad cast at the rate of a bushel per acre, of the numerous varieties of peas among us, except the "black-eyed," which, having very little vine, affords little shade. In all cases I prefer those which have the most vine, and ripen earliest. When the land has much weeds or grass upon it, turn under the peas with any kind of plow, running not over three inches deep. If the land is bare of weeds, I prefer covering the peas with a large heavy harrow, running both ways—first lengthwise and then across the beds. As it is important to give the peas a start over the weeds and grass, I soak them six hours in water, and rub them in plaster of Paris; and, when they begin to leaf and branch, say, when twelve inches high, I sow plaster at the rate of a bushel per acre. This stimulates their growth, and they overpower the weeds and grass.

When about half the peas are ripe—not "half ripe"—hogs should be turned in to trample and cut up the vines, otherwise it is extremely difficult to turn them under. So soon as this can be done, the hogs should be taken off, for shading the land from the summer's sun—a most important matter in all improvement—and giving to the thin soil a large mass of vine leaves and other vegetable substances. From experience in the use of both, I think peas but little inferior to clover (to which family, indeed, it belongs,) as a specific manure for wheat.

After this mass of vine has been turned under, you have a "pea ley," over which sow a bushel and a half of wheat per acre, and six quarts of clover seed. Harrow both in thoroughly, and let the work be finished by the middle of October. The return will, of course, depend somewhat on the quality of the "old field;" but I venture to affirm, that it will amply repay all labor and outlay, and astonish by the great result apparently from so trivial a cause.

I am familiar with the great increase of crops from the use of lime and clover, and I do not mean to compare the two methods of renovating land as equal; but where lime is not to be had, there is no application that can compare for a moment, on well drained land, (if it need draining) with plaster, peas and deep tillage. No gold mine is so valuable as a good marl pit. I am, however, confining myself to interior districts, where neither lime nor marl can be had.

After the wheat comes off in June following, the clover, if sown early in October, will have grown so as to shade the land pretty well, even on the waste I speak of. It should not be grazed the first year, at all: in the February after, top-dress it with all the manure to be had, not forgetting to apply all the *old ashes* within reach. This time of the year, (winter) is best for applying manure in our country, where the hot sun acts so injuriously on a bare surface. The roots of the young clover being protected from the hard frosts and sudden changes, by the manure, it shoots forward with the earliest warmth of spring, and smothers all weeds. When the weeds mature their seeds, they draw upon the fertility of land equal to most crops. Clover gives a crop equal to any other, and is all returned to the land in droppings of the stock while grazing upon it. As proof of its profit, for three years I have never fed my working horses on grain or fodder but once a day, from the middle of May till the clover fails. They are turned on the clover field after the day's work is over, and taken up in the morning in good condition for service. I have never lost one by this management: in fact they improve from the time they are thus treated, and work better.

After the clover has been on the land for two summers, during which period it has dropped three crops of leaves and stalks, and thereby greatly improved the land, either turn it under as before, in September or October, for wheat, or later in the fall for corn the ensuing year. In the former case, you will find your land as thickly set as before with volunteer clover, which ought to remain as a pasture for the summer, after the second crop of wheat comes off. If corn instead of wheat, be grown, sow peas broadcast among the corn at the last plowing, soaking the seed and rolling them in plaster as before. After the corn crop, do not suffer the land to "lie out." No error can be more opposed to good farming, than that which assumes that land is improved by "laying out" and permitting a crop of weeds to mature upon it. If we had duly reflected, this error would long since have been apparent, in the continued quantity, of thousands of acres lying waste around us, *not a whit improved by "lying out."* After the soil has once been brought up by peas, subsoiling, or deep plowing and clover—all within reach of the farmer even in the interior—it will not again relapse unless the former barbarous and senseless practice of exhaustion and negligence be again adopted. If lime can be had, even at a cost of 20 cents a bushel, I would in all cases spread it on the land, after the first crop of peas had been turned under, to the amount of fifteen or twenty bushels per acre. This quantity will greatly benefit the land, and enable the owner shortly to repeat the application of a like quantity.

Canada and the United States.

Hon. Mr. Fergusson, member of the Canadian Parliament, in his speech at the late meeting of the Canadian Agricultural Association, spoke of the agreeable intercourse he had enjoyed with the people of the state of New-York in the following terms. He said for seven years past he had been in the habit of attending the New-York State Agricultural Fair. He had had the honor of being invited there from year to year, and he would say that if they would only go there with candid feelings and with a desire to improve, they would see something that would aston-

ish them, that would bring them up, as farmers, considerably in the scale of human nature. (Great applause.) They would see farmers where they ought to be, the leading principal men in the country. There was no class of society equal to the farmer, all depended upon the farmers for their support—they had not taken that position which they ought to have done, and which they deserve; but he trusted the natural results of such meetings would make them feel their own importance, as they do on the other side. There he had uniformly met with a great degree of kindness. He could assure their friends from the other side, that there existed the kindliest feelings here towards their neighbours, who go hand and heart with them in the way of improvement; and he would say if they would continue to send their notions, they would send them their dollars in return, and besides they would give them the warm hand of friendship,—happy to meet as good friends for the interchange of good feelings and with the desire to do each other all the good they could —of course every one minding what was for his own interest.

In conclusion, he would take this opportunity of thanking his friends for all the kindness and hospitality he had met in attending State fairs, and would beg leave to propose—"Prosperity to the New York State Society, and all its members." (Cheers.)

Characteristics of the Season of 1850.

Throughout a large portion of the country, the distinguishing feature of the past summer has been the unusual quantity of rain, and the frequent displays of lightning. In this respect the season was the opposite of 1849. The theories which some have entertained, as to the effect of rail-roads and electric telegraphs, in preventing thunder storms, are, we presume, pretty well shattered by the numerous severe shocks of the last season.

The following table shows the quantity of rain which fell at Albany, during each month, from May to September, inclusive, for the present and last year. The average quantity for the whole year is 41 inches:

	1849. Inches.	1850. Inches.
May,.....	5.40	6 01
June,.....	4.45	5.72
July,.....	0.70	8.57
Aug., ...	4.83	2.50
Sept,....	1.06	6.56
	16.44	29.36

April was cold, and May was cold and wet; from which cause, seeding was much delayed. Little was done in May; and from the Potomac and Ohio, to the St. Lawrence and the lakes, a great portion of the Indian corn, oats, barley, and spring wheat, was not deposited in the soil till the first week in June. Seed-time being thus retarded, the growth of all crops was forced into a very small compass. Vegetation in general was, however, uncommonly rapid and luxuriant, when fairly started. We had no drouth in this section,—the grass preserved its freshest and brightest green from May to November. The foliage of the trees has been of unusual density and richness, and the growth of both forest and fruit trees has been remarkably large.

Hay was abundant through the middle, eastern and northern States; but owing to the watery character of the grass, and to the unfavorable weather at the time of making, the quality is inferior to an average. In Ohio, Indiana and Michigan, the crop was injured by drouth which occured in June. The meadows along many of the principal streams in New-York, were overflowed by the great rains of July, and the grass so injured by the deposit of earthy matter, that it was rendered worthless for hay.

Wheat, taking the whole country together, gave a bountiful yield. Probably the whole amount of the crop is considerably larger than any before harvested in this country. In Ohio, and the western States, generally, it is represented as very fine. The drouth in June checked the growth of straw, but the grain filled in the best manner. In some neighborhoods of Western New-York, the grain was injured by being sprouted while standing in the shock; but we think the damage from this cause was of less magnitude than was at first represented. *Spring* wheat has not, generally, done as well as usual, owing, chiefly, to the weather being too wet at the time the grain was forming. The wheat-midge has been less prevalent at the eastward, the past season, than for several previous years.

Rye has given, perhaps, an average yield, though it was injured by too much wet, except on the driest soils.

Barley, it is said, has not done as well as usual, either in yield or quality. The central counties of this State constitute the main district for the cultivation of this grain, and for the supply of the large breweries along the Hudson river.

Oats, in many places, were much injured by the great storm of the 19th of July. They were beaten flat to the ground by the wind and rain, and in many instances did not sufficiently recover to fill well. Comparing the crop of this year, however, with that of 1849, for the whole country, we think it probable that the balance would be in favor of the present year. The crop of the former year, it will be remembered, was greatly injured by drouth.

Indian Corn has generally done well. As before remarked, it had but a short time to grow—scarcely more than three months, and the general maturity of the crop, before the occurrence of frost, is a striking example of the rapid progress of vegetation under the effect of intense summer heat. The yield is represented as satisfactory, except in some instances in the most northern portions of the country, the ears have been small in proportion to the stalks. This defect was chiefly confined to wettish soils, or fields where the planting was too thick to admit the proper action of the sun.

Potatoes have been more affected by rot than in any year since 1845. The crop, except on very wet and heavy soils, flourished well, and in the earlier planted fields, the usual quantity of tubers were formed; but the rot has lessened the value of the crop to the amount of at least fifty per cent.

Fruits, in this section have hardly given their usual yields. The apple crop is light, over most of the New-England and Northern States. The fruit did not *set* well. This remark is also applicable to plums, and some other fruits. The cause is supposed by some to have been the prevalence of wet weather at the time the trees were in blossom. This, it is thought, prevented the proper deposition of the impregnating pollen. Does observation support this theory? Some kinds of apples, as Spitzenburgs and Newtown Pippins, are more specked with black, and less fair than usual. Pears have been badly affected by blight. Trees that have heretofore escaped this scourge have this year been seriously attacked, and in many instances ruined. The Virgalieu, or White Doyenne, has been cracked and spoiled to a great extent in this vicinity. Peaches were abundant through New Jersey, Delaware, &c., from which they were sent in large quantities, and

at very low prices, over the northern and eastern sections of the country, and to the Canadas. Plums were not equal to a medium crop. Grapes, except in warm soils and sheltered situations, have failed to ripen well, from want of clear, hot weather towards the close of the season.

The weather, during autumn, has been generally mild, with occasional moderate rains. The latter half of September was, for the most part, unseasonably cold, but with only one or two frosts, and even up to the first of November there has been less frost than there often is before the first of October. The ground has been frozen but two or three inches. The leaves have fallen from the trees, from their having died a "natural death"—they had fulfilled their office, and were no longer needed. The autumnal hues of our forests have been splendid indeed, and with the rich green of our pastures and meadows, and the mellow atmosphere of the "Indian summer," our landscape scenery has possessed high attractions for those who can appreciate the beauties of nature.

Culture of the Onion.

Eds. Cultivator—My little girl, who feels a common interest in the cause we are all laboring to promote, has favored me with the annexed copy of a statement by a worthy and intelligent cultivator in this town, which I forward, to be used at your discretion. It shows a net profit of about *one dollar to each square rod cultivated,* which is doing quite well for a yankee soil. I saw the crop in the field, and after it was gathered, and have full confidence in the accuracy of all that is said.

If I do not mistake, Mr. B's manner of preparing his land; of raising his seed; of pulverizing and applying his manures; of keeping his ground entirely free of weeds; of careful attention that every movement shall be made at the best time and in the best manner, affords instructive lessons for the cultivation of other vegetables as well as onions. I know not whether much attention is given to this crop in your region, but this I have observed for a number of years, no labor upon the soil in this neighborhood is more liberally rewarded, than that which is applied to this culture. The demand seems to increase with the growth, so that notwithstanding the products have quadrupled, all are readily sold from 35 to 45 cents the bushel, according to quality.

Our cultivators of late are very partial to the use of the *side hill plow,* even upon their plain lands, because it leaves them free of all *back furrow ridges,* and *dead furrow hollows,* and as they think, in lighter and better condition. The old notion of plowing shallow and keeping the hard land for the raising of the onion is exploded; it being found that deep plowing is equally serviceable in this, as in most other crops.

Particularly do they find that the bulk of the manure applied should be well covered and intermingled with the earth; and that much stirring of the soil has a highly favorable influence on the growing crop. But I forbear to multiply my own remarks, my purpose being simply to give you *the practical results* of *the hard hands themselves.* Very respectfully and truly yours, J. W. Proctor. *Nov.* 8, 1850.

Statement of Mr. Buxton.

To the Committee on Root Crops:—I find the piece of land, planted with onions, to which I asked your attention, to contain one hundred and five poles, and to have produced the present season four hundred and forty-eight bushels of onions fit for the market; being about three and one-third bushels to the square rod. The onions were not extraordinary large, but were remarkable for uniformity of size, and excellence of quality. They are as handsome as any I ever raised. They are of the species called silver skin. They are thick and plump, which form has been produced by careful attention in selecting such for seed for several years; I raise my own seed, and am particular to set only such for this purpose as I wish to raise. I find, in this way, that their form can be modified as I wish.

The land on which they grew is part of a field of 13 acres, on Collins plains, a light soil free of stone. For the last ten years it has been under good cultivation, and freely manured,—most of the time this parcel has yielded onions. Barn manure, compost, ashes, and muscle bed have been the principal applications. Ordinarily when we plant onions we apply 5 or 6 cords of manure, to the acre. In 1849, finding the crop to have failed on this piece, yielding short of 300 bushels to the acre; I thought it needed some other nutriment, and as soon as the crop was gathered I sowed it with oats, using a cultivator to cover them. These grew luxuriantly, and late in the fall, just as the ground was about to freeze, I turned them under, using a *side hill plough,* running the furrows about eight inches deep. The entire crop was buried by the furrow and so laid until spring. On examining it then I found the oats as sound as when turned in; consequently I could not plow the land. I went over several times with a cultivator, and then applied a moderate dressing of manure from my hog yard to the surface, say about two and a half cords to the lot, and mingled it with the soil as well as I could, taking care to remove all obstruction to the even distribution of the seed; and then planted with a machine in the usual way. It came up evenly and grew well through the season, being kept entirely clear of weeds. The appearance of the plants through the season was uncommonly good—manifestly deriving much aid and support from the decaying green crop underneath. This is proved by another piece of onions in the same field, cultivated and manured in the usual way, where the crop was not more than two thirds as large as this. I am the more particular in describing this experiment with the oats, because it has succeeded beyond my expectations. I have seen other fields of onions where they grew to a larger size than these, and have no doubt mine would have been larger, if I had put on more manure, but as a whole I have never seen a handsomer yield. They sell at the present time for $1.25 per barrel delivered in Boston. I have so long been accustomed to keep my land clear of weeds, that the labor of taking care of onions is not more than twice as much as is required for indian corn. I had no thought of offering this crop for premium until requested so to do. If this plain statement of facts shall be thought worthy of your notice, I shall feel much gratified. Daniel Buxton. *Danvers, Mass., Oct. 21st,* 1850.

Capons.

Professor Dick, a distinguished veterinarian of Edinburgh, gives in the *North British Agriculturist,* the following directions for caponising fowls:

Select a young cock—say from three to six months old, keep him fasting for 24 hours—let an assistant hold him on his back, and then make a transverse incision at the posterior end of the sternum (breast

bone,) so as to allow the forefinger to be introduced freely into the cavity of the abdomen; the finger is to be passed first on one side forward, by the side of the spine, and the testicle detached with the nail (which should be allowed to grow long, to facilitate the operation;) and having got out the one, the other must be removed in the same manner. The wound should then be closed with a suture, and the bird placed in a warm room, and fed on soft food for a few days. Instead of cutting away the testicle with the nail of the finger it is the practice in some countries to introduce a small tube, or reed, with a double thread, forming a noose, which, being passed over the testicle, is drawn outwards through the tube, so as to cut off the connection, and the testicles are thus removed, one after the other. The Chinese adopt this method, and use a reed, and a thread of cane fibre, which, by its firmness, and at the same time elasticity, suits well for getting on the noose. The operation may also be performed by making an incision before the thigh, in the side, in the same manner as in spaying pigs; but it is sometimes difficult to get out both the testicles in this way, and an incision is, therefore, sometimes required to be made in the other side, and the double operation is more likely to destroy the animal. Some make capons by passing the finger along the rectum, and break down the testicles by pressure, but it frequently does not succeed, and even if they are not removed from the abdomen, after the operation has been performed by incision, it sometimes happens that they adhere again, and resume their functions, and the bird is not castrated. Examine the body of a dead cock before operating. Pullets are made by dividing the oviduct, in consequence of which the abdomen gets filled with eggs; an incision is made the same as in making capons: the bird must be killed after a certain period.

Knowledge of Geology Important to the Farmer.

EDS. CULTIVATOR—In the preliminary treatise on Natural Philosophy, on the objects, advantages, and pleasures of science, published by the Society for the Diffusion of Useful Knowledge, there are some excellent illustrations given, with one of which we will introduce this communication. The writer says,—"There is hardly any trade or occupation in which useful lessons may not be learned by studying one science or another. To how many kinds of workmen must a knowledge of mechanical philosophy be useful! To how many others does chemistry prove almost necessary! Every one must with a glance perceive that to engineers, watch-makers, instrument-makers, bleachers, and dyers, those sciences are most useful, if not necessary. But carpenters and masons are surely likely to do their work better for knowing how to measure, which practical mathematics teaches them, and how to estimate the strength of timber, of walls, and of arches, which they learn from practical mechanics. Nay, the farm servant, or day laborer, whether in his employer's business, or tending the concerns of his own cottage, must derive great practical benefit for knowing something of the nature of soils and manures, which chemistry teaches, and something of the habits of animals, and the qualities and growth of plants, which he learns from natural history and chemistry together. In truth, though a man be neither mechanic or peasant, but only one having a pot to boil, he is sure to learn from science, lessons which will enable him to cook his morsel better, save his fuel, and both vary his dish and improve it. Science then makes men more skillful, expert, and useful in the particular kinds of work by which they are to earn their bread, and by which they are to make it go far and taste well when earned." Thus,

> "Though nature weigh our talents and dispense
> To every man his modicum of sense;
> Yet much depends, as in the tiller's toil,
> On culture, and the sowing of the soil."—*Cowper.*

New names must be given to new sciences as they are born, and the languages of the Greeks and Romans are those most usually drawn upon for this purpose. The science which describes the solid materials of the earth, the order in which they are arranged, and the causes which have affected that arrangement, has been named Geology, from the Greek, ge, the earth, and logos, discourse. The knowledge of the relations of this science to the successful cultivation of a country, is at present possessed by few farmers. Some understand its connection with the formation of the soils they cultivate, but even these are a minority. It may safely be said, that this knowledge is a desideratum, the want of which, together with that of other sciences of a kindred nature, now distinguishes our agriculturists. But it is remarked there are many good farmers who are not Geologists, who perhaps do not form a correct idea of the meaning of the word. They, however, neither understand the principles of their art, nor can they derive any intellectual enjoyment from the results of their practice; such men are "born to blush unseen!" We do not mean to undervalue that sure practical guide of the farmer, *experience*, nor the result of long and frequent attention to numerous local circumstances; these are wheels within a wheel, yet of no subordinate importance.

Numerous instances might be cited of the benefits conferred by Geology upon agriculture. The intermixture of soils where one kind of earth is either redundant or deficient, is practiced in some places with great advantage. Red sandstone districts are converted into fertile land by intermixing with them the calcareous marl which they frequently contain in detached beds. So with the clay marl generally underlaying pine plains. The green sand marl of New-Jersey is applied to sandy soils with much benefit. "When we behold," says Pro. Rogers, in his report to the Legislature of that State, "a luxuriant harvest, gathered from fields where the soil originally was nothing but sand, and find it all due to the use of a mineral sparsely disseminated in the sandy beach of the ocean, we must look with exulting admiration on the benefits conferred upon vegetation by a few scattered granules of this unique and peculiar substance. The small amount of green-sand dispersed through the common sand, is able, as we behold, to effect immeasurable benefits in spite of a great predominance of the other material, which we are taught to regard as, by itself, so generally prejudicial to fertility."

We would regard it as a great advance upon the present position of the farming community, if each proprietor was qualified to name the rocks and minerals which are incidentally met with in crossing his fields. What pleasure would be derived by the formation of cabinets of geological specimens found on farms! How many young minds grow up sealed to knowledge, because those around them to whom they naturally apply, are sealed likewise! But it is gained by application, we will not say unremitted, but assiduous and continued, until its attainment seats its possessor on a throne. A. K. *Albany, Nov.* 1850.

New Kind of Manure.

Immense numbers of cattle were formerly slaughtered in South America, chiefly for their hides—the carcasses being left on the plains as food for wolves and vultures. Latterly, however, it has been found that a portion of the flesh and fat may be saved with profit. The process by which this is done is thus described:

"The best part of the beef is cut off in long strips, which are dried in the sun; and the remainder of the flesh and the whole of the bones are put into a large vat, with a double bottom, the upper one of which is perforated with a number of holes. A current of steam is then admitted into the space between the two bottoms, by which means the tallow is gradually melted, runs through the holes, and is collected in a vessel for the purpose; the current of steam being kept up as tallow is obtained. The remainder of flesh and bones is then thrown out, and has hitherto been regarded as refuse; but a considerable quantity of it having accumulated, the proprietors of the works were anxious to find a use for it, and they have accordingly commenced exporting it as a manure."

Considerable of this substance has been taken to Scotland. It has been analysed in the laboratory of Prof. ANDERSON, chemist to the Highland Agricultural Society, and the results are given as follows:

Water,	9.05
Fat,	11.13
Animal matter,	39.52
Phosphate of lime,	28.74
Carbonate of lime,	3.81
Alkaline salts,	0.57
Sand,	7.16
	100.00

The substance is described as consisting of pieces of bone, mixed with dry and fibrous flesh. It emitted a strong odor, though from the dry state of the mass, its decomposition proceeds with great slowness. Prof. ANDERSON thinks this manure will be likely to prove of considerable importance. He thinks it comes nearer guano than any other manure, though it is not quite equal to the best of that article from Peru. He observes, however, that "it will, in all probability, prove a slower manure than guano; and should this be the case, it will present considerable advantages, for there is little doubt that in many instances guano proves too rapid in its action—not giving sufficient support to the crop the latter part of the season.

A Receipt to Preserve Pork.

Take 1 lb. of Black pepper, and grind it fine for one barrel, or 200 lbs. of pork, and sprinkle on each layer of pork, until it is quite brown—then put on the salt. It helps to preserve the meat, and adds greatly to the flavor and smell of it. I have practiced it for years. LINDLEY M. VAIL. *Quakertown, N. J., 10th mo., 22nd,* 1850.

Cultivation of Cranberries.

EDWARD THACHER, of Yarmouth, (Mass.) furnishes the officers of the Barnstable County Agricultural Society an account of his mode of cultivating cranberries. The following is his statement:

July 12th, 1845, I purchased for $40, then considered more than it was worth, one and a half acres of land—about one half a sandy beach and the remainder a low peat meadow covered with water. A rim of about six feet in width around the bog and between the water and the beach, had a few cranberry vines on it, which had been closely fed off. In the spring of 1846, I drained the bog and covered about one-eighth of an acre with sand three inches thick, and set it with cranberry vines in rows two feet apart and hoed them four times in the season of 1846, and once in the spring of 1847. The grass then got advantage of me, and I left the vines to work their own way. They have now nearly overcome and worked out the grass and rushes. On the remainder of the bog I strewed vines, and trod them in the mud, by walking over them. These grew with rapidity without any farther care except flowing in the winter. In the fall of 1848 I gathered from ten rods where no sand had been spread, as many bushels of cranberries, while on the part sanded I had scarcely as many quarts. The latter are now doing better, having got the advantage of the grass, and I think will finally work it out. I have this year, on the quarter of an acre offered for premium, quite a good crop, although the worms destroyed nearly one half. I have picked one square rod of the light colored variety, set in the mud, and it yielded two bushels and twelve quarts, (or at the rate of 380 bushels to the acre.) One square rod of the small dark colored variety on the mud yielded one bushel and two quarts. The large red variety yielded on the mud two bushels to the square rod. The whole quarter is not yet gathered; it will yield about thirty-five bushels, about one half of the vines being set on mud and one half on sand.

In selecting soil for cranberries, it is highly necessary to select such as will not dry in summer, but much also depends on the selection of the vines, as the Committee will see by the samples here presented, all having the same soil and the same treatment. The *samples are not selected, but sent in precisely as they grew.* The whole expense on the above bog, up to the present time, does not exceed $40.

I have received from the sale of cranberries, up to the fall of 1849,		$320.00
Deduct for picking, one-fourth,	$80.00	
All other expenses for setting, interest, &c.,	40.00	
		120.00
Net profit,		$200.00

PRIZE WHEAT.—At the late exhibition of the Agricultural Association of Upper Canada, the *Canada Company* offered a prize of £25 for the best 25 bushels of wheat, and £12 10s for second best lot of the same quantity. DAVID CHRISTIE of Dumfries, received the first prize. The variety was the *white blue-stem,* which he first obtained at the New-York State Fair at Buffalo in 1848. It is said to have weighed 66 lbs. to the bushel, and to have yielded 36 bushels to the acre.

TO YOUNG FARMERS.—One of the most important parts of a young agriculturist's professional education, is the characteristics, marks, qualities, and capabilities of all descriptions of live stock necessary for agriculture. Some knowledge of sketching or drawing the live animals would be highly conducive to the pupil ascertaining a proper idea of shape and proportion; and should there be an intelligent butcher in the neighbourhood, I would recommend him to see as much *of his* business as he can consistently with his other occupations—to weigh the live animal, from its handling, size, and appearance in his mind; attending the slaying of such animal, examining its weight when dead, and comparing this with his own opinion of it when alive, would all lead him to form more correct and solid opinions in his future transactions with fat stock. *Lecture on Agricultural Education.*

Notices of Publications.

PICTORIAL FIELD BOOK OF THE REVOLUTION; or Illustrations, by Pen and Pencil, of the History, Scenery, Biography, Relics, and Traditions of the War for Independence. By BENSON J. LOSSING. With six hundred Engravings on wood, by LOSSING & BARRITT, chiefly from original sketches, by the author.

THIS is the title of a work now in course of publication, by HARPER & BROTHERS, New-York. It is designed to furnish "a pictorial and descriptive record of a journey recently performed, to all the most important historical localities of the American Revolution." This design is admirably fulfilled, so far as the work has been completed. It is just what the public needed, and we deem it fortunate that it has been undertaken at this time. Mr. LOSSING has saved from oblivion, and preserved in an imperishable and beautiful form, the image of many an interesting relic, which, after a few more years, it would have been impossible to obtain. Besides his pictorial sketches, which are of the most truthful and natural description, he has collected many interesting historical incidents from aged patriots, in whose minds the memory of the trying scenes of the Revolution is still fresh. All the illustrations are accompanied by well-written descriptions and explanations, which comprise both the historical facts with which they are connected, and the personal observations of the author. Altogether, the work is one which has many attractions, especially to the young, by whom it cannot fail to be read with great avidity. The engravings are of a style not inferior to anything of the kind which has ever appeared, and the whole execution of the work is of the very best character. It is issued semi-monthly, and will be completed in about twenty-numbers, of forty-eight pages each, octavo; the price only twenty-five cents a number.

HARPER'S NEW MONTHLY MAGAZINE.—This highly useful work, which was only commenced in June, has already attained an unprecedented circulation—FIFTY THOUSAND copies being issued. The publishers say it is their "leading object to present to the public, in handsomer style, and at a cheaper rate, a greater amount of reading matter, combining entertainment with instruction, than is given in any other periodical in the world." It is certainly the medium of circulating a very great amount of valuable information. The work is handsomely printed, on good paper, and is issued monthly, at twenty-five cents per number. HARPER & BROTHERS, New-York.

Answers to Correspondents.

STEEL CULTIVATOR TEETH.—D. M., Louisa C. H., Va. Rogers' patent steel cultivator teeth are made by various persons. The form of the bottom of the tooth, as now preferred, is triangular. From seven to nine teeth are used for two-horse or field cultivators. The teeth are so long as not be liable to clog. Nathan Ide, Shelby, Orleans county, N. Y., manufactures cultivators for preparing ground for wheat and other grain, which have been much approved. D. Hinkston, Clarkson, Monroe county, and E. R. Dix, Vernon, Oneida county, make good articles of this kind. We have not their prices. For sowing wheat on "corn ground," the use of the cultivator is sufficient, without the plow, if the soil is rather loose; but if it is hard, as clayey soil is likely to be, it had better be plowed. The same remark will apply to sowing spring grains on land that was cultivated the previous season. In any case, it will be advisable to work the soil before scattering the seed. The teeth alluded to are made and sold by GAY & HOSKINS, Seneca Falls, N. Y. The price is 50 cts each, wholesale, or 62½ cts retail.

FOLDING SHEEP IN SUMMER.—D. M. Folding sheep, except in winter, is but little practiced by northern farmers. Sheep would probably be injured by confinement at night, without food, during the extreme heat of summer. At that season, they feed but little during the day, but graze much at night, while the air is cool and the dew is on the grass. They might, probably, be folded on turneps in autumn, without injury. It is true that folding is extensively practiced in England and Scotland, but the weather is there so temperate that the animals can graze in the day time.

Notes for the Month.

To our Agents and Correspondents.

To our AGENTS,—who have heretofore done so much to promote the circulation of our journal, and to whom we tender our grateful acknowledgments,—we send with this number a Prospectus for our next year's volume, together with a copy of THE PICTORIAL ALMANAC, for 1851, a copy of which is to be sent to all subscribers for next year, and solicit a continuance of their kind offices in behalf of THE CULTIVATOR. It will be seen by reference to the last page of this number, that we have renewed our liberal list of Premiums to Agents, for which we trust there will be a spirited competition.

We tender our hearty thanks to all those CORRESPONDENTS who have contributed so liberally to our pages, the past and previous years. It is to them that THE CULTIVATOR is indebted for a large portion of its interest and usefulness; and we should be glad to receive contributions for our pages from a much larger number of its readers than heretofore. We trust our friends will not be backward in this matter. We want the details of practice and experiments, and facts and suggestions on all subjects in which the farmer is engaged,—everything, indeed, which will enlighten the mind, and increase the profits of the farm. Will not many of those who have been reaping the benefit derived from information received through THE CULTIVATOR, now come forward with their quota for the benefit of others?

IMPORTATION OF CATTLE INTO NEW BRUNSWICK.—Mr. JOHN H. REID, of Fredericton, N. B., has imported from England a short horn bull and heifer, which we are informed are of the best blood. They were purchased for Mr. R. by H. STRAFFORD, Esq., editor of the *Herd Book*. The bull, *Giovanni*, (vol. 9, H. B. 10272,) was bred by Mr. Harvey Combe, Cobham, Surrey. He was calved February 10, 1850. The heifer was bred by Mr. John Bell, Kirkleavington, Yorkshire. She was calved February 13, 1848, and is in calf by *Grand Duke*, which was

sold at the sale of the late Mr. Bates' herd for £215,50. Mr. REID has also imported some valuable swine; and with the fine assortment of poultry which he has collected, we presume his place presents many attractions.

COMMUNICATIONS have come to hand, since our last, from B. P. J., H. C. Meriam, S. W. Jewett, Prof. Norton, A Subscriber, J. W. Proctor, S. B. Buckley, T. S. Gold, John Townley, W. A. Ela, Reviewer, C. H. McCormick, L. M. Vail.

BOOKS, PAMPHLETS, &c., have been received as follows:

Pictorial History of the Revolutson, by B. J. Lossing, parts I to IX, and Harpers's New Monthly Magazine, for November—from Messrs. HARPER & BROTHERS, New-York.

The New Englander, for November—from the publisher, J. B. CARRINGTON, New Haven, Ct.

Three Lectures on Hygeine and Hydropathy, by R. S. Houghton, M. D.—from FOWLERS & WELLS, New-York.

The Churches and Sects of the United States, by Rev. P. D. Gorrie—from LEWIS COLBY, publisher, New-York.

V. B. Palmer's Buisness-men's Almanac, for 1851—from the publisher.

The Agriculturist's Guide and Almanac, for 1851—from J. G. REED, publisher, New-York.

The Illustrated Domestic Bible, by the Rev. Ingram Cobbin, parts VIII and IX—from the publisher, SAMUEL HUESTON, New-York.

LARGE CAULIFLOWER.—We have received from Mr. B. B. KIRTLAND, of the Cantonment Farm, Greenbush, a cauliflower which weighed, closely trimmed, twelv epounds. It was of delicious quality. Mr. K. has been very successful in the culture of this vegetable. His soil is a slaty loam. His method of cultivation is to dig a hole a foot deep, and eighteen inches square; fill it half full with common yard manure, unrotted; lay a fresh sod, three inches thick, grass downward, on the manure; fill the hole with soil, and set the plant. The plants are first started in a hot-bed, and set out in May.

☞ We have also received from Mr. JOHN S. GOOLD, of this city, very fine specimens of the Walcheren cauliflower, grown by him. This variety is of superior delicacy and flavor.

FRUITS FROM CLINTON COUNTY, N. Y.—We have received from JONATHAN BATTEY, of Keeseville, specimens of the "Northern Sweet" apple, and also a sweet apple under the name of "Surpasse Tallman." The first named was brought to the notice of the Congress of Fruit-growers, last year, and recommended for cultivation. As a sweet apple, we know of none superior to it, in its season—October and November. The "Surpasse Tallman" is a fine and handsome apple, somewhat similar in character to the Tallman Sweeting, but rather richer and sweeter. We do not know for what particular qualities Mr. BATTEY thinks the Surpasse superior to its predecessor. Mr. B. sent us a specimen of a pear, called "Platt's Seedling." We have received no particulars in regard to its origin or qualities. The specimen sent was very fair, and of good size. It was so much over ripe that we could not fairly judge of its qualitles. It is sweet, melting and juicy.

SALE OF THE STICKNEY STOCK.—We noticed, briefly in our last, the sale of the live stock of the late WM. STICKNEY, at Westminster, Vt., on the 9th of October. We have since received a detailed account of the sale from W. S. KING, Esq. of Manton, R. I., by whom the sale was conducted. From this account it appears that the full blood Devons brought prices averaging as follows: viz., three bulls, $149.33 each; three cows, from three to eleven years old, $109.16 each; one two-year old $160; one yearling $150. Twelve grade cows, three years old and over, brought an average of $58.33 each. Seven grade two-year-old and yearling heifers, $52.85 each. Four grade heifer calves $22.50 each, and four grade bull calves $25 each. One pair four-year-old oxen, $100; one pair three-year-olds $80; two pair two-year-olds an average of $54 each; two pair yearlings an average of $38.50 each. Of the swine, one Suffolk sow, (imported,) six years old, brought $80; another, two and a-half years old, $60; another four years old, $40; an Essex sow, with nine pigs, $129; a Suffolk, with six young pigs, $110; two Suffolk sows, ten months old, $42.50 each.

POULTRY SHOW AT BOSTON.—The first exhibition of the New England Society for the Improvement of Poultry, was held at the Public Garden in Boston, on the 12th, 13th and 14th of November last. In extent, the display exceeded the expectations of all, and in this respect it was probably unequalled by anything of the kind which was ever before known. The report of the officers will show the details. The whole number of specimens was upwards of twelve thousand. All classes of domestic poultry were represented, but the *Gallus* genus comprised much the largest portion of the show. In this department, almost every distinct variety, as well as every possible mixture, was brought out—from the pert little Bantam of one pound, to the gigantic Malay of twelve pounds weight. The latter tribe of fowls greatly took the lead as to numbers. The object of most of the breeders of this stock, appeared to be to produce the largest frame; and hence a large proportion of the fowls exhibited, were of awkward, uncouth form, with enormous bones, and with comparatively small amount of flesh. There were, however, some exceptions to this, indicating that in judicious hands, a valuable variety of fowls may, by long-continued selection, be bred from this large Asiatic stock. In support of this remark, we might refer to the superior specimens offered by WM. BENT, Cochituate, and the fine white fowls offered by A. A. ANDREWS, Dedham.

Turkies presented but little variety. A singular freak of nature was seen in a male bird of this species, belonging to Dr. H. C. PARKER, of Manchester, N. H. A small bunch of feathers, several inches in length, grew from the back of the head, in the form of a plume. There were three species of phesants—the English, and the golden and silver Chinese. Pigeons of several species, and all the fancy varieties were shown.

The web-footed birds comprised all domestic species, including swans, and several species of geese and ducks, not common in a domestic state. Among the rarities in this department, was a pair of Egyptian geese, (*Chenalopex egyptiacus,*) exhibited by JOHN GILES, of Providence, R. I. We are not aware that this singular species has been before introduced into this country. Among the ducks, were fine specimens of the Aylesbury, the beautiful Summer or Wood duck, the Teal, the Pin-tail, and the Diver.

Several very large and interesting collections of birds, comprising many of the most rare kinds, were offered by various individuals; among which we noticed those of THOS. E. CHICKERING, Roxbury; JOHN GILES, Providence, R. I.; SAML. JAQUES, Jr., Somerville; W. W. CHENERY, West Cambridge, and others.

The exhibition was attended by great crowds of people, during the three days, and every one seemed delighted with the opportunity of seeing and comparing the most interesting and useful species and breeds, belonging to the feathered race.

DEATH OF A NOTED HORSE.—We are informed that the well-known horse *Gifford Morgan*, died at the stable of BENJAMIN GATES, in Walpole, N. H., on the 30th of October last. If we mistake not, he

was twenty-four years old. By reference to the advertisement of Mr. BLODGETT, in this number, it will be seen that he has some of the progeny of this valuable animal.

LARGE EGG.—Col. E. LONG, of Cambridge, N. Y., has sent us an egg laid by a full blood game hen, which measures six by eight inches in circumference. It weighed, just four ounces.

ANDRE LEROY,

Nurseryman at Angers, France,

ALREADY well known in the United States and in Europe, having obtained at the last French National Fair, in Paris, the only Gold Medal awarded, both for his Fruits and Ornamental Trees, begs leave to inform his friends, and the public in general, that he is now ready to execute, with the greatest care and despatch, all the orders that might be sent to him. His Catalogues may be had on application to his agent in New-York, Mr. EDOUARD BOSSANGE, merchant, who will receive and forward all orders for Mr. LEROY directed to his care, and also pass through the Custom House and forward to their respective destinations, without any trouble to the importers, all *trees* and plants ordered. Dec. 1—3t.

Agricultural and Horticultural Implements, and *Field and Garden Seeds.*

UPWARDS of *one hundred* different kinds of Plows, and a corresponding variety of all other Implements for the Farmer, Planter and Gardener; embracing the largest and most complete assortment to be found in the United States. Also, Field and Garden Seeds, a large and varied assortment. A. B. ALLEN & CO.,
August 1, 1850.—tf. 189 & 191 Water St., New-York.

School of Applied Chemistry,

YALE COLLEGE, NEW HAVEN, Conn.

JOHN P. NORTON, Prof. of Scientific Agriculture.
HENRY WURTZ, First Assistant.

STUDENTS are received in this Laboratory as a special class distinct from the other college departments, and instruction is given in all branches of Chemistry, both organic and inorganic, general and special.

Every facility is afforded to those who desire to become proficient in Scientific Agriculture, in the analysis of soils, plants, animal substances, manures, &c. Students taken with special reference to their becoming instructors.

A Course of Lectures upon *Scientific Agriculture*, by Prof. NORTON, will commence about the middle of January, and continue two and a half months. This course is intended to present a plain and intelligible view of the connections of science with agriculture, which may be understood by any farmer. Mr. Wurtz proposes to lecture on some points of Applied Chemistry during the summer term.

The lectures of Prof. SILLIMAN on Geology and Mineralogy, and those of Prof. OLMSTED, on Natural Philosophy, Astronomy and Meteorology; also the college libraries and cabinets, are accessible to the students.

For information as to terms, &c., apply to Prof. NORTON,
Oct. 9, 1850—4t *New-Haven.*

A New Hardy Climber.

THE new and beautiful CLIMBER, Calestigia pubescens, recently introduced from China, by Mr. Fortune, proves perfectly hardy in New England, having stood in the grounds here the past winter, without the least protection. Trained to a single pillar, say 10 feet in height, it is a very striking and beautiful object from the middle of June till cold weather, during which time it is covered with a profusion of its large double flowers, of a delicate rose color. It is very ornamental planted in patches like the verbenas; makes an admirable screen, and is very effective in young plantations, belts, or shrubberies, trailing prettily on the surface, and running up among the lower branches of trees in a very picturesque manner. It is, therefore, particularly suited for ornamenting cemeteries and public gardens. Its culture is very simple, and it thrives in any good garden soil. When required in considerable quantities, it is best to start it under glass in February or March, but the tubers may also be planted in the open ground in May. The subscriber will send to order, by mail or express, October 20th, tubers sufficient for 100 plants, at $5.00; 50 plants, $3.00; with directions for propagation and culture.

Strong plants in pots, in April, $1 per pair. B. M. WATSON.

Old Colony Nurseries, Plymouth, Mass., Oct., 1, 1850—tf

The American Live Stock Insurance Company,

At Vincennes, Ind.

CHARTER unlimited. Granted January 2, 1850. ☞Capital $50,000!☜ For the Insurance of *HORSES, MULES, PRIZE BULLS, SHEEP AND CATTLE*, of every description, against the combined risks of *Fire, Water, Accidents and Disease.*

Losses paid in 30 days after proof of death.

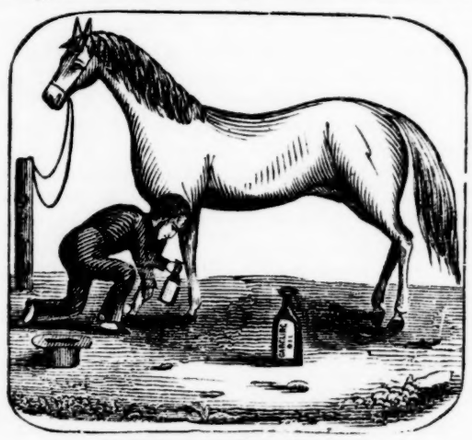
Directors.—Joseph G. Bowman, Hiram Decker, M. D., Isaac Mass, George D. Hay, John Wise, Alvin W. Tracy, Hon. Abner T. Ellis, Abm. Smith, Hon. Thomas Bishop. Joseph G. Bowman, *President.* B. S. Whitney, *Secretary.* Wm. Burtch, *Treasurer.*

Aug. 1, 1850—1yr. B. P. JOHNSON. Agent. Albany.

Important to the Farmer, Farrier, and Stage Proprietor.

Geo. W. Merchant's Celebrated Gargling Oil.

Unparalleled in the History of Medicine as the most remarkable External Application ever discovered for Horses and Human Flesh!



Caution to Purchasers.

This Oil has become so celebrated in the treatment of diseases of the horse, and as a consequence the demand becoming great throughout the country—that the cupidity of designing men has induced them to palm off upon unsuspecting persons, an imitation article for the *Genuine Gargling Oil*; designing thus to ride their *base mixture* into market upon the popularity of the only true article, which now sustains an enviable reputation, which it has acquired by more than fourteen years' use in the United States and Canada.

It is allowed by farriers and all who have used it, to be decidedly the best application for horses and other domestic animals, of any now in use, and may be used as an internal remedy in some cases, with surprising results

A faithful trial of this remedy will satisfy any person that the many cures it proposes to perform are neither magnified nor misrepresented.

The following among many others, in the cure of which this Oil has been completely successful, and in which other pretended remedies had entirely failed:—

Spavins, Sweeney, Ringbone, Windgalls, Poll Evil, Callous, Cracked Heels, Galls of all kinds, Fresh wounds, Sprains, Bruises, Fistula, Sitfast, Sand Cracks, Strains, Lameness, Foundered Feet, Scratches or Grease, Mange, Rheumatism, Bites of Animals, External Poisons, Painful Nervous Affections, Frost Bites, Boils, Corns, Whitlows, Burns and Scalds, Chilblains, Chapped Hands, Cramps, Contraction of the Muscles, Swellings, Weakness of the Joints, Caked Breast, &c.

Remarkable Power which the Gargling Oil possesses in reducing Morbid Animal Fungus, or Excrescences.

Extract of a letter, dated, Sunbury, Pa., Aug. 2, 1850.

Dr. G. W. Merchant—SIR—I must relate a new case in which your Gargling Oil has done great things.

I heard a man telling to-day that his little girl had a sore knee that had had a thick scab on for a long time. He had a Doctor attending it, but he could do nothing with it. What it was I do not know, but the scab was from a half, to one inch thick, and covered the whole knee-pan. He said he had the Gargling Oil in the house, and it struck him that it might cure. He put it on, and in two days half the scab came of. He then applied it the second time, and in a day or two the other half came off, and he found a new skin coming on it, with the exception of a few places. He applied it the third time and now she is perfectly well of it. P. B. MASSER.

Extract of a letter ordering a new supply of Gargling Oil, dated, North Bergen, N. Y., Aug. 20, 1850.

Dr. G. W. Merchant—SIR—I have sold all but one bottle of the Gargling Oil you sent me. It gives most excellent satisfaction to every one to whom I have sold, whether they use it as a common Liniment in their families or on their horses.

Please send me two dozen of each size bottles, as I think I shall sell it in about that proportion. Respectfully,
D. F. MERRILL.

All orders addressed to the Proprietor will be promptly responded to.

Get a Pamphlet of the Agent, and see what wonders are accomplished by the use of this medicine.

Sold by respectable dealers generally in the United States and Canada.

The following are wholesale and retail agents, viz:—A McClure & Co., Albany; M. Ward & Co, and C. V. Cleckner & Co., New-York; P. D. Orvis & Co., and C. Heimstreet, Troy; L. M. Rexford, Binghamton; R. Steel, Auburn; Wm. P. Mooers, Plattsburgh; Rossman & McKinstry, Hudson; J. W. Williams & Co., and R. Hollister & Co., Buffalo; T. H. Camp, Watertown; Wm. Pitkin, and Post & Willis, Rochester; Lampman & Williams, Syracuse; Greenman & Smith Utica; A. D. Platt, Geneva; C. Canfield & Son, Oswego; Jenner, Sprague & Co., Ogdensburgh; G. W. Schuyler, Ithaca. Dec. 1—1t.

THE SATURDAY EVENING POST.

THE LEADING AND LARGEST WEEKLY IN THE UNION.

THE SATURDAY EVENING POST is now, beyond all denial, the leading as well as the largest Weekly Paper in the United States Its circulation is undeniably greater than that of any other paper, of the same kind in the Union, while its literary contents are allowed, by the best judges, to be unsurpassed. Such tales as "The Deserted Wife," "Shannondale," "The Child Stealer," and "The Two Brides," have placed "The Post," by almost universal admission, a "head and shoulders" above its cotemporaries.

We have now the pleasure of announcing to the American Public, that we have made arrangements with one of the

FIRST NOVELISTS IN AMERICA,

MRS. EMMA D. E. N. SOUTHWORTH, author of "RETRIBUTION," "THE DESERTED WIFE," "SHANNONDALE," etc., by which the productions of her gifted pen will be secured hereafter, (with the exception of an occasional story in a Washington paper)

EXCLUSIVELY FOR THE POST.

Mrs. Southworth, as an American Novelist of great power—a rising Star in the West—has been hailed with acclamation by all those who can recognize genius as well in a native as in a foreign author. We design to commence a

NEW STORY BY MRS. SOUTHWORTH,

about the beginning of the year. How many stories she will be able to furnish during 1851, will depend upon the state of her health, &c We trust, however, that we shall be able to lay before our readers, at least THREE of those splendid productions which have made her name already so distinguished.

In the intervals of Mrs. Southworth's Novelets, we design publishing other and shorter Novelets from authors of admitted celebrity. We have two now on hand, which we shall publish as soon as possible:

THE IRON HAND, by T. S. ARTHUR, Esq,

THE TEXAN HUNTRESS, by C. W. WEBBER, Author of "Old Hicks, the Gaide," "The Shot in the Eye," etc.

And mark this! What the proprietors of the Post promise, they perform—or do better. They do not announce a long list of distinguished contributors, with whom they have made no arrangement, and whose stories never appear. Such a system may delude an intelligent public *one* year, but it will not answer a *second* time. If the public are humbugged *once*, it is the fault of the humbugger; if *twice*, it is their own.

In addition to such choice ORIGINAL articles, involving a large outlay of money, the columns of the Post will contain a great amount of Miscellaneous reading—such as the

CREAM OF THE FOREIGN PERIODICALS.

Witty and Humorous Articles, Selections from the Agricultural Journals, Riddles and Conundrums, etc., etc.

REPORTS OF LECTURES—during the past year we gave the celebrated Lectures on Shakspeare by Mr. Dana; and the instructive and interesting ones of Dr. Baird upon Europe—Letters from Abroad—General News—Reports of the Markets—a Bank Note and Stock List, etc., etc.

One or more PORTRAITS of remarkable persons, or PICTURES OF REMARKABLE PLACES are also weekly given

A MORAL PAPER.

In conclusion, we may say—that we shall maintain for the Post the character it has acquired of being a strictly moral paper; one that a parent may allow to go freely before his innocent sons and daughters. We need hardly repeat here, that the Post has done more to prevent the publication and sale of immoral works, than any half-a-dozen other papers in the land. A careful guard shall also be kept, as heretofore, over our ADVERTISING COLUMNS, that nothing of an improper character may obtain admittance.

In short, whatever is calculated to refine, instruct, amuse, or gratify, shall find its appropriate place in the POST; and let the reader mark one thing, whatever others may *promise*, we will not be behind in the *performance*. A paper that has stood for 29 years, steadily progressing all that time, and which has now the *largest* list of subscribers of any paper of the same class in the United States, is not to be left behind in the race by *any* rival.

TERMS.

The terms of the POST are Two Dollars if paid in advance, Three Dollars if not paid in advance. For five Dollars one copy is sent three years. We continue the following low terms for Clubs, to be sent, in the city, to one Address, and, in the country, to one post-office.

4	**COPIES,** - - - - - - - - -		**$5 00**	**PER ANNUM.**
8	"	(And one to Agent, or getter up of the Club,)	**$10 00**	"
13	"	(And one to Agent, or getter up of the Club,)	**$15 00**	"
20	"	(And one to Agent, or getter up of the Club,)	**$20 00**	"

ONE COPY of the Saturday Evening Post, and ONE of either Graham's Magazine, Godey's Lady's Book, or Sartain's Magazine, for FOUR DOLLARS.

The money for Clubs must always be sent in advance. Subscriptions may be sent at our risk. When the sum is large, a draft should be procured, if possible—the cost of which may be deducted from the amount. Address, *always post-paid.*

DEACON & PETERSON,
No. 66 South Third Street, Philadelphia.

N. B.—Any person desirous of receiving a copy of the POST as a sample, can be accommodated by notifying the publishers, by letter *post-paid.*—Dec. 1—1t.

Pear Seedlings.

THE undersigned offers for sale, 100,000 pear seedlings, from $8.00 to $20.00 per 1,000, and a great variety of dwarf and free stocks for nurseries at low prices—fruit and ornamental; also

Deodar Cedars, 1 to 3 ft., $1 to $3; Araucaria imbricata, $1, Cedar of Lebanon, $1; Thuya filiformis, $1.50; Lonicera Ledebourii, 50 cents; Spiræa Reevsii, 50 cents; —— prunifolia fl. pleno, 50 cents; Japan Pear, double crimson, 50 cts; Ribes albidum, 50 cts; Spiræa Lindleyana, 50 cents. New Lilacs, fine Double Hawthorns, and a full assortment of ornamental plants, of which a priced list will be sent, post paid, to order.

APPLES—A few hundred extra Dwarf Pyramidal Apples, of the best sorts, in a bearing state.

RHUBARB—Ten thousand Willmott's Early, and Myatt's Victoria Rhubarb.

IVES' WASHINGTON SEEDLING PLUM—(Originated by J. M. Ives, Esq., of Salem, Mass.) is pronounced by the best judges equal to any American Plum yet produced. It is of great size and beauty, and of delicious flavor. $2.00

Local Fruits.—The Watson Pear, an excellent early pear, (August 20,) handsome, and of good size, of a peculiar and delicious flavor; an old favorite here, where it has fruited above sixty years. The Horseblock or Manonet, Sassafras or Spur Sweet, Holmes and Hightop Apples, are all excellent fruit, descriptions of which may be found in the leading Horticultural Magazines for the years 1849-50. One of each of the above, $2.00. B. M. WATSON.

Old Colony Nurseries, Plymouth, Mass., Oct. 1, 1850—tf.

Drain Tile Works,

63 Jay Street, North of Salamander Works, Albany.

THE subscriber is now manufacturing and prepared to fill orders for Horse Shoe, Sole, Round and Collar Drain Tile, of various sizes, from one to four inches in width and rise. The tile is cut sixteen inches in length, and will be of a superior quality. The price will vary according to the size and shape, from $10 to $16 per thousand. Specimens of the article with the prices will soon be distributed to all the agricultural stores in the State. Presidents of county societies adjoining the river and canals, will please send their address with directions to whom a box containing the different sizes of Tile will be forwarded free of charge.

July 1, 1850—tf. A. S. BABCOCK.

Agricultural Warehouse and Seed Store.

No. 197 Water street, (near Fulton,) New-York.

THE subscribers would respectfully invite the attention of planters and dealers in Agricultural and Horticultural Implements, Garden and Field Seeds, &c., &c., to their large and varied assortment of Garden and Field tools, &c., which they are selling at the very lowest rates that they can be procured in the United States. Persons living at a distance can obtain an "illustrated" Catalogue, containing a list of prices, on application by letter, post-paid. Those ordering from us may depend upon their orders being promptly filled.

May 1, 1850—tf. JOHN MAYHER & CO.,

Premiums to Agents of the Cultivator.

AS an inducement to greater exertion on the part of those disposed to act as Agents, the following PREMIUMS will be paid, in Books, or Implements or Seeds, from the Albany Agricultural Warehouse, to those who send us the largest list of subscribers for our next volume:

1. To the one who shall send us the largest number of subscribers to THE CULTIVATOR for 1851, with the pay in advance, at the club price of sixty-seven cents each, previous to the 20th of March next, the sum of FIFTY DOLLARS.
2. To the one sending us the next largest number, the sum of FORTY DOLLARS.
3. To the one sending us the next largest number, the sum of THIRTY DOLLARS.
4. For the next largest list, the sum of TWENTY DOLLARS.
5. For the next largest list, TEN DOLLARS.
6. For the FIVE next largest lists, each FIVE DOLLARS.
7. For the TEN next largest lists, each THREE DOLLARS.
8. A copy of Thomas' "AMERICAN FRUIT CULTURIST," price one dollar—a very valuable work—or any other dollar book—to every Agent who sends us fifteen subscribers and $10, and who does not obtain one of the above prizes. LUTHER TUCKER.

Albany, N. Y., Dec. 1, 1850.

THE HORTICULTURIST AND Journal of Rural Art & Rural Taste.

EDITED BY A. J. DOWNING,

Aulhor of "Landscape Gardening," "Designs for Cottage Residences," "Fruits and Fruit Trees of America," &c., &c.

TO all persons alive to the improvement of their gardens, orchards or country seats,—to scientific and practical cultivators of the soil,—to nurserymen and commercial gardeners, this Journal, giving the latest discoveries and improvemens, experiments and acquisitions in Horticulture, and those branches of knowledge connected with it, will be found invaluable. Its extended and valuable correspondence presents the experience of the most intelligent cultivators in America; and the instructive and agreeable articles from the pen of the Editor, make it equally sought after by even the general reader, interested in country life. The "FOREIGN NOTICES" present a summary from all the leading Horticultural Journals of Europe; the "DOMESTIC NOTICES," and ANSWERS TO CORRESPONDENTS, furnish copious hints to the novice in practical culture: and the numerous and beautiful Illustrations,—Plans for Cottages, Greenhouses, the Figures of New Fruits, Shrubs and Plants, combine to render this one of the cheapest and most valuable works on either side of the Atlantic.

A NEW VOLUME, (the 6th.) will be commenced with the January number, 1851, when it is proposed to make some material improvements in the mechanical appearance of the work; and no efforts will be spared, by the editor or publisher, to render the work still more worthy of the liberal patronage extended to it.

TERMS—Three Dollars per year—Two copies for Five Dollars. All payments to be made in advance, and orders to be post paid.

☞ All Agents for THE CULTIVATOR, and Post Masters generally, are invited to act as Agents for THE HORTICULTURIST.

LUTHER TUCKER,

Albany, Dec., 1850. *Publisher, Cultivator Office, Albany, N. Y.*

The Old Gifford Morgan Horse.

THE death of this noted horse, which took place at the stable of Benjamin Gates, in Walpole, N. H., October 30th, 1850, may be considered a public loss, deeply affecting the agricultural interests of the country, cutting them off from the purest source of MORGAN blood. His stock inherit, in a remarkable degree, the nerve, form, strength and action of the *original Morgan Horse.* For the pedigree of this horse, I would refer the reader to articles from the pen of F. A. Wier, Esq., to be found in the Albany Cultivator, for January and September, 1846, pages 19 and 286.

I consider myself fortunate, however, in having at this time on hand, five colts of his get, all promising well; being very fine colts of their several ages, and from mares of high Morgan blood.

I have a chestnut colored (free from white) stallion colt, two years old the 8th of June last, dam by the Old Woodbury Morgan; also a chestnut colored filly, white stripe in her face, two years old 17th of August last; her dam by the Green Mountain Morgan, grandam, Messenger; also a chestnut colored stallion, one year old last July, no white except about half of one hind foot; his dam by the old General Hebard Morgan. A colt foaled on the 30th day of April last, mahogany bay, with a small star in his forehead, a small spot on his upper lip, and one hind foot nearly to the ancle joint white; his dam, my Green Mountain mare, mother of the two-year old filly described above; and lastly, a chestnut filly, with no white upon her, foaled 20th day of June last, from a mare from which has been raised at least two very fast horses.

My mare, by Green Mountain, and another one by a colt of the old Woodbury, appear to be now in foal by old Gifford. Still I have, in common with others, reason to feel deep regret that so valuable a sire has passed beyond our reach.

The increasing demand for the Morgan stock of horses, through the length and breadth of the United States and the Canadas, is a recommendation in their favor, much stronger that anything that I or any other individual can say or write in their praise.

Waterbury, Vt, Nov. 8th, 1850. C. BLODGETT.

Devon Stock for Sale.

TWO fine Devon Cows, 3 and 6 years old; also a fine yearling Bull and Heifer.

The subsbriber offers the above for sale, of pure blood, and bred from the best stock in the country. FRANCIS W. COWLES.

Farmington, Conn. Nov. 23d, 1850. Dec 1—6t.

$500 TO $2000 A YEAR.

FIVE HUNDRED AGENTS WANTED In all the States of the Union,

Including California,

TO CANVASS FOR THE FOLLOWING important and valuable works, which are sold by subscription.

We have now about two hundred Agents in the field, many of them clearing from *two to eight dollars per day.* It will be seen that they are all of a very popular and desirable kind, and calculated to please almost every taste. For further particulars apply (post paid) to the publishers, DERBY & MILLER,

Auburn, N. Y.

"HOW A FARMER MAY BECOME RICH."

Blake's Farmer's Every Day Book,

Or how a Farmer can become rich—being sketches of Life in the Country; with the Popular Elements of practical and Theoretical Agriculture, and twelve hundred Laconics and Apothegms relating to Morals, Regime and general Literature; also 500 receipts, on health, Cookery and domestic economy; with ten fine illustrations, representing the various scenes attendant upon Farming, etc., By John L. Blake, D. D., author of "Biographical Dictionary," "Family Encyclopedia," &c.

The publishers respectfully announce that they have undertaken the publication of this large and beautiful work, with a view to supply a *desideratum* that has long been felt—a book for *every Farmer's Library*—believing that the venerable author has produced a work that will be worth its weight in gold to every Farmer's family, that thoroughly peruse it. It is proper to state that Dr. Blake is a *practical farmer*, and has reclaimed a sterile and worn out piece of land into a valuable and productive farm—which experience, with his well known qualifications as an author, peculiarly fit him to prepare a book for farmers.

The work contains 654 pages, large octavo, with a motto surrounding each page. It is printed on fine paper, and bound in substantial imitation Turkey Morocco, gilt back. Invariable retail price, $3.00.

Frost's Pictorial History of California.

The History of the State of California, from the earliest period of her conquest by the Spaniards, to her acquisition by the United States; with an account of the discovery of the immense Gold Mines, and the quantity of Gold already obtained; the enormous increase of population; a description of the Mineral and Agricultural resources of the country; with adventures and travels among the mines. Also, advice to Emigrants, as to the most desirable *routes* thither. To which is added the Constitution of the State of California, with numerous illustrations, and a Map of California, and the gold mines, in one octavo volume, 500 pages; bound in same style as Mexican War. Retail price, $2,50.

"I am prepared—I have endeavored to do my duty."

The Life of Zachary Taylor,

Late President of the United States, including the closing scenes of his life and death, by H. Montgomery—embellished with a steel portrait and 15 illustrations, in one elegant octavo vol., 463 pages, well printed on fine paper, and bound in substantial morocco, gilt back.

"The lightnings may flash, the thunders may rattle,
He hears not, he heeds not, he's free from all pain,
He sleeps his last sleep, he has fought his last battle,
No sound can awake him to glory again."

More than 20,000 copies of the above work have been sold by us, and the demand is unabated. It is allowed by critics, to be the most complete and authentic copy of any of the works purporting to be a Life of the Great Man of the Age. Retail price $2,00.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

LUTHER TUCKER & SANFORD HOWARD, Editors.

$1 per ann.—7 copies for $5—15 for $10.

☞ All subscriptions to commence with the volume, (the Jan. No.) and to be PAID IN ADVANCE.

☞ All subscriptions, not renewed by payment for the next year, are discontinued at the end of each volume.

☞ The back vols. can be furnished to new subscribers—and may be obtained of the following Agents:

NEW-YORK—M. H. NEWMAN & Co., 199 Broadway.

BOSTON—J. BRECK & Co., 52 North Market-st., and E. WIGHT, 7 Congress-st

PHILADELPHIA—G. B. ZIEBER.

ADVERTISEMENTS—The charge for advertisements is $1, for 12 lines, for each insertion. No variation made from these terms